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A SENTRY GROUP
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50th ANNIVERSARY ISSUE

AIRWAR IN KOREA SABRE VS. MIG

USAF, F-51, F-82, F-80, B-26, F-84, B-29, F-94
USN & USMC, F4U, F7F, F3D, F9F

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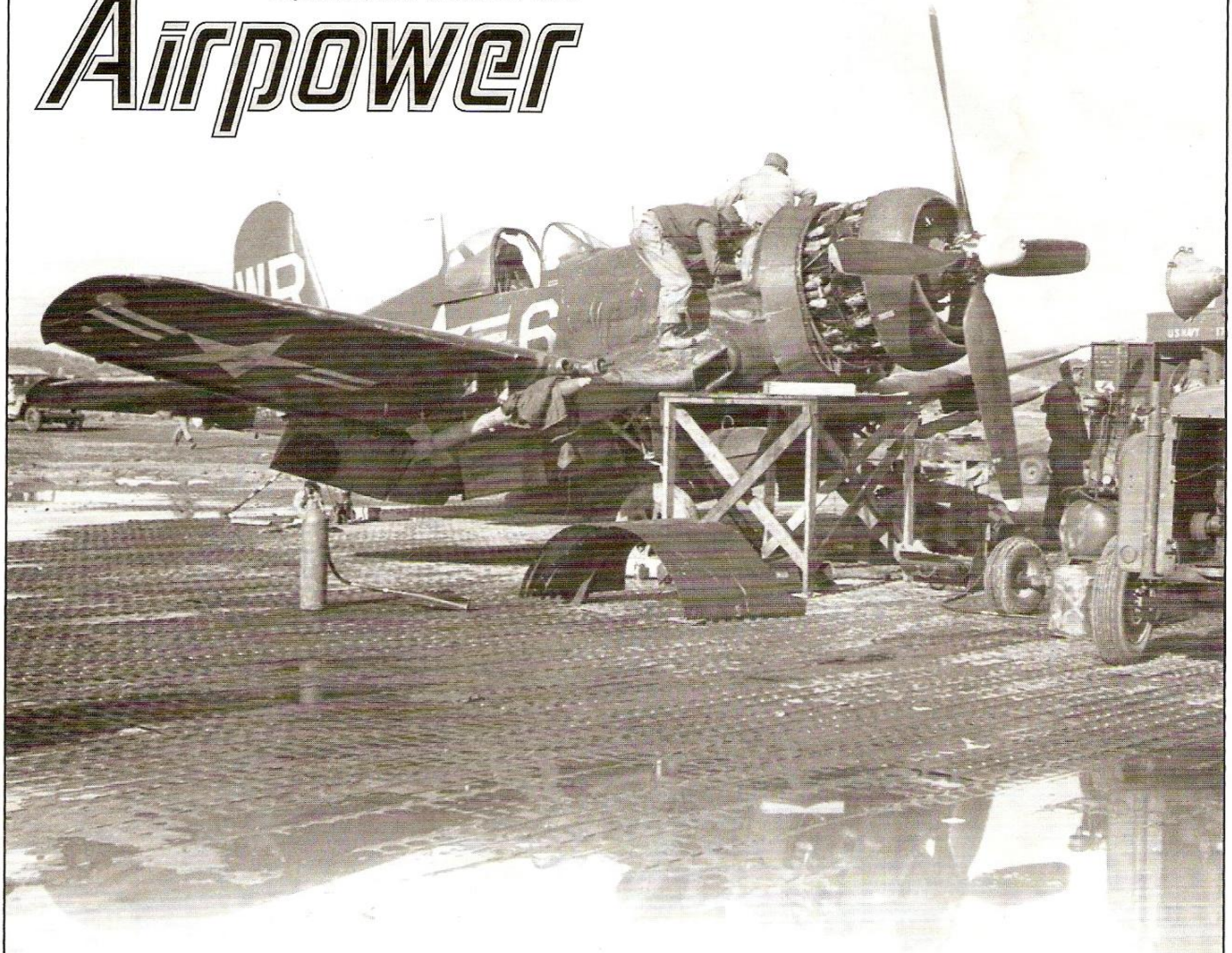

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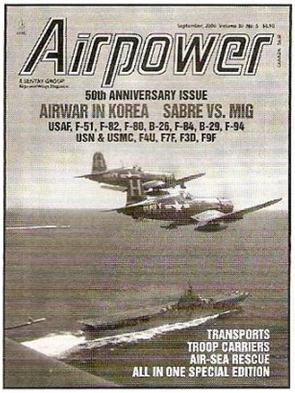

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Cover: Vought F4U Corsairs from VF-163 Overfly *USS Valley Forge* (CV–45), off the Korean Coast. (USN)

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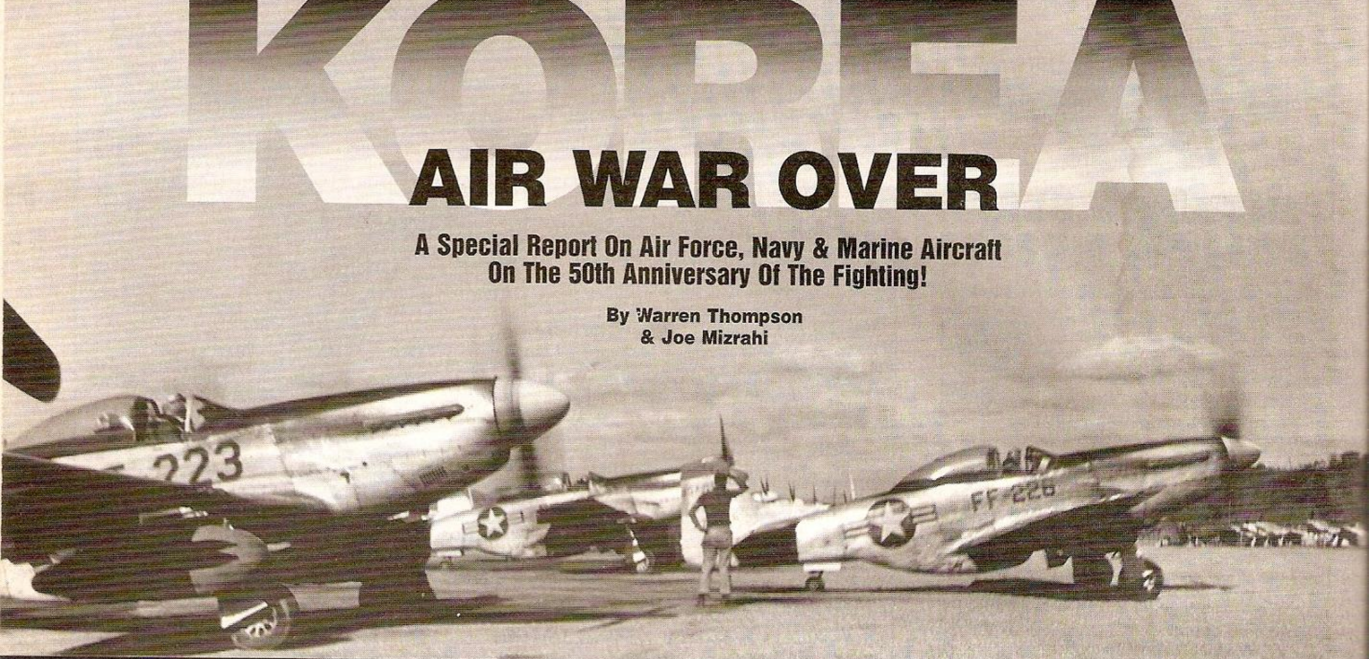
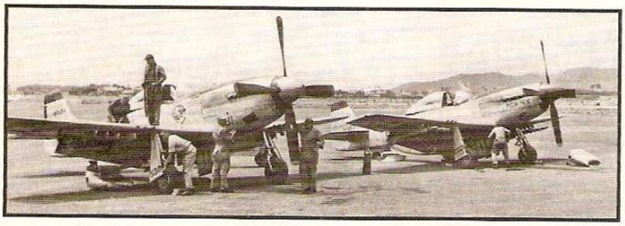
AIR WAR OVER KOREA

A Special Report On Air Force, Navy & Marine Aircraft On The 50th Anniversary Of The Fighting!

By Warren Thompson
& Joe Mizrahi

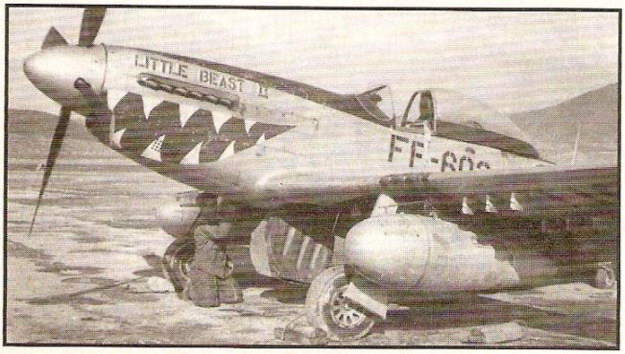


When war broke out in Korea in late June, 1950, Far East Air Force (FEAF) had just about phased out its old P–51D Mustang fighters from first line service, transitioning personnel to the new Lockheed P–80 jet. The World War II retreads were already in storage on active airbases in Japan, and because their former pilots and ground crew were familiar with them, were quickly taken out and immediately employed to provide air cover over evacuation sites in South Korea. For the next twelve months they would remain the principal and most numerous U.S. fighter-bomber. Here, the entire 39th Squadron is shown taxiing out for a mass strike against enemy troop concentrations. FF–226 carries a pair of 500 lb. bombs, while FF–233 is loaded with napalm and rockets. Part of FEAF's enlarged 18th Fighter Bomber Wing, formerly a group based at Clark AB, Philippines, they are shown launching from a forward staging base (K-46) close to the front lines. The 39th later moved up to F–86s with the 51st Fighter Wing. (James Harris)



A pair of 39th Mustangs, now known as F–51s, being rearmed at Chinhae, South Korea. Circular insignia, just ahead of cockpit on aircraft at left, is that of the Indiana Air Guard's 113th Fighter Sqdn., denoting previous service there. In all, 66 Guard squadrons of all types were called to active duty during the Korean War, although not all went to Korea. Of these, 30 units flew P–51Ds, the only model of the Mustang sent to the battle zone, the 113th serving from February 1, 1951 through October 31, 1952.

Complete with shark-mouth nose, *Little Beast II* is readied for a mission with a pair of large napalm tanks underwing. Forward airfields in Korea were primitive, little more than a flattened area reinforced with pierced steel planking (PSP), also known as Marston Mat.



Editor's Note: To most Americans who had even heard the name, Korea, in 1950, was a small, largely unknown country in Asia, located somewhere between China and Japan. Prior to that, the Idaho-sized nation had been an occupied province of the Japanese Empire, which ruthlessly exploited its people for fifty years, referring to them disparagingly as "garlic eaters." Little was known about the Koreans, although after-battle reports from the war in the Pacific often listed Korean laborers as being among the few survivors of Japan's conquered island garrisons.

Half a century has passed. South Korea has emerged as a significant industrial power, its energetic and talented population supplying much of the world's new shipping, tens of millions of household appliances, television sets, cameras, computers, microwave ovens and nearly every type of electronic device, as well as hundreds of thousands of economy cars sold in the U.S. Although it has suffered its share of political strife, the country is an operating democracy, a valued U.S. ally and trading partner, and has become a model for small nations to pattern themselves after.

What a difference fifty years makes! For none of this would have been possible had not a determined U.S. president, Harry S Truman, a former captain of U.S artillery, and sometime haberdasher, decided not to allow a small nation to be given up to a treacherous aggressor doing the bidding of a ruthless power bent on remaking the world in its own image.

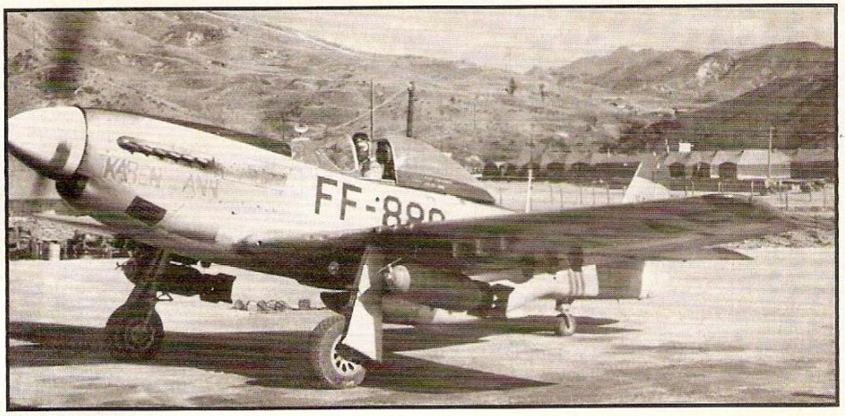
Once Harry Truman committed U.S. troops to fight in Korea, the Cold War between America and the Soviet Union became hot, and it would stay that way for nearly forty years, until that infamous wall in Berlin finally came down.

Was it worth it? It depends on who you are and where you were. During that war, Communist Chinese and North Korean forces suffered nearly one and one half million casualties. Civilian losses in both North and South Korea were two million. United Nations losses, including 850,000 Republic of South Korea servicemen, were just under one million. Nearly 34,000 of that total represent Americans killed in combat. Next time you program your VCR or load your auto-focus camera and take advantage of a product bearing the manufacturer's name, Samsung, Gold Star or Hyundai, think about it!

The Korean War, which began half a century ago in June, 1950, has been called the forgotten war. Some termed it a police action. Even though more than 54,000 Americans lost their lives during three years of bitter fighting, with another 103,000 wounded, the euphemism "conflict" is often used to differentiate it from other full-fledged blood-lettings such as World War II. But make no mistake; Korea was an all-out war, particularly to those who served there.

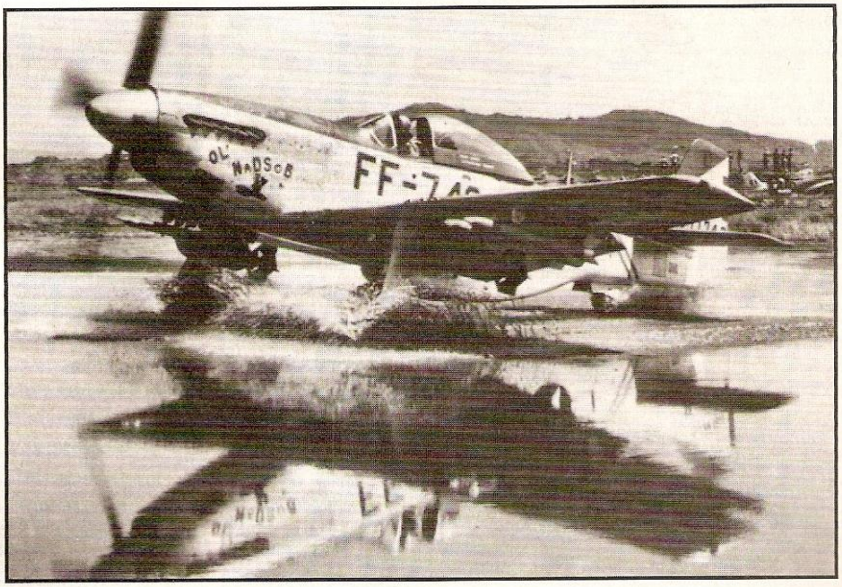
It was also the first time the United Nations responded militarily to a major act of aggression against one of its members. Although the United States bore the brunt of the military burden, along with the fledgling Republic of South Korea – which suffered over two million service and civilian casualties – troops from Australia, Belgium, Canada, Great Britain, Greece, France, the Netherlands, the Philippines, Turkey and New Zealand also sent contingents to fight and die in Korea's mountainous and forbidding terrain.

The opening clashes embarrassed the U.S. and its allies, demonstrating how woefully unprepared our military was, in this, the first significant engagement in a long-term struggle against the forces of worldwide Communism.

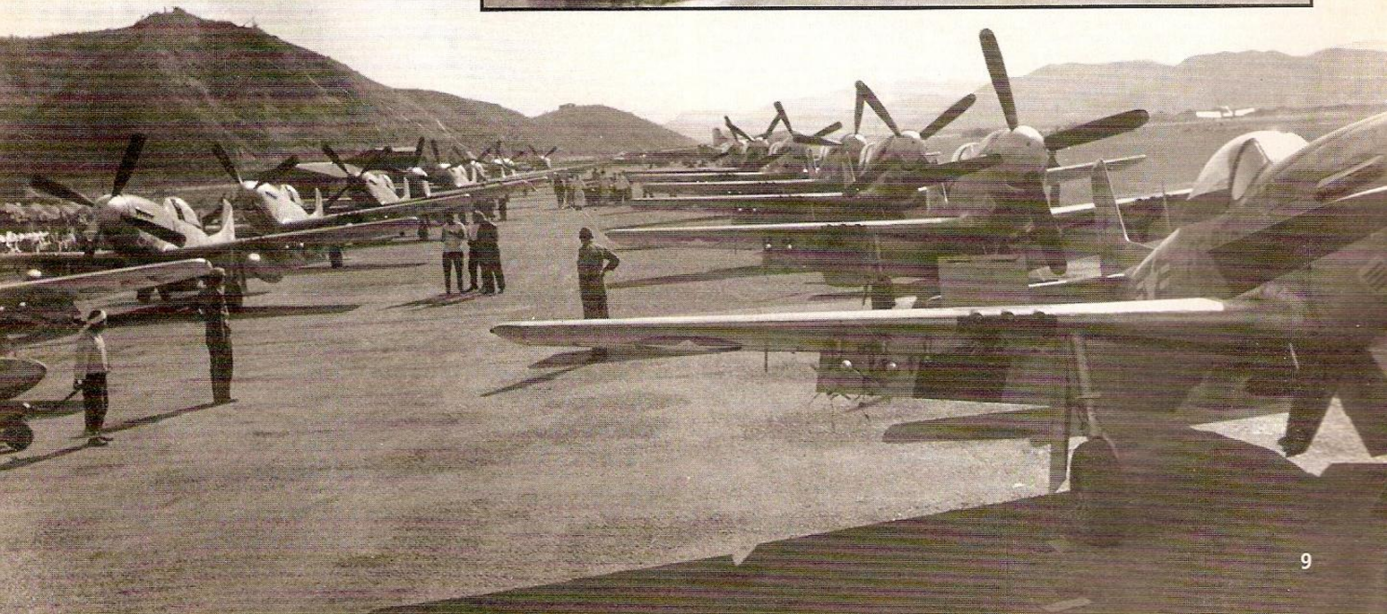


Above: The time is late 1951, and this 39th Sqdn. F–51 taxies out on Hoengsong's main runway armed with a pair of 500 lb. bombs. Behind the hurricane wire fence are tented quarters for personnel. Fighting at Hoengsong in the Seoul area was especially fierce, the ROK army losing heavily.

Below: A 67th Fighter-Bomber F–51, originally from the 18th Fighter-Bomber Gp. at Clark AB in the Philippines, splashes through a lake created by a summer monsoon. It carries a pair of 500 lb. bombs inboard and a quartet of 5-inch rockets outboard. During the early months of fighting, F–51 pilots flew several missions per day, often coming back to their forward bases only to find they had been overrun by North Korean forces.

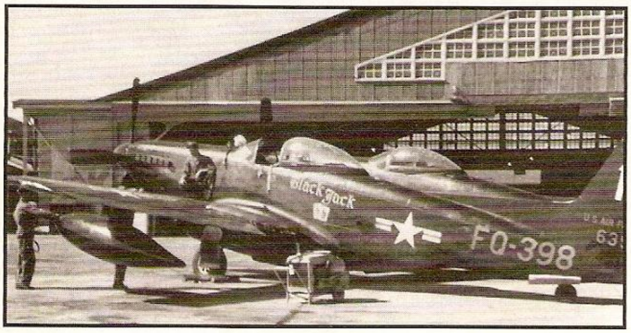


Bottom: More F–51Ds from the 39th Fighter Bomber Sqdn., along with the 2nd South Korean Sqdn., all part of the 18th Fighter Bomber Wing, are loaded with rockets and napalm for an early afternoon strike against Chinese positions in the late fall of 1951. Munitions were brought to flight line by South Korean civilian labor and then loaded by ordnance teams. Although the F–51 could not compete with the MiG–15's near 200 mph. speed advantage, its maneuverability and instant acceleration usually took it away from those Soviet interceptors which ventured south.

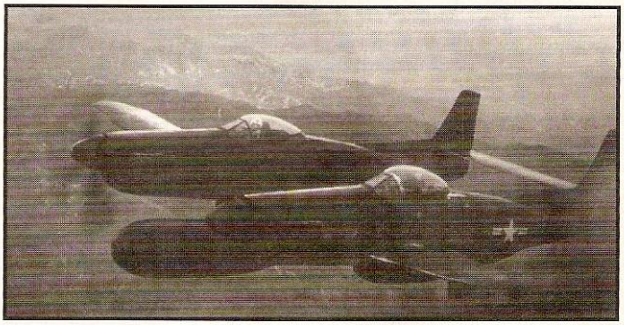


The 12th Fighter-Bomber Sqdn., also from the 18th Group, rendered yeoman service during the fighting around the Pusan perimeter in the late summer of 1950, after enemy troops drove UN forces to the tip of the Korean Peninsula, where they rallied under General Walton Walker.

The F–82 Twin Mustangs based at Yokota, Japan, with the 339th All Weather Fighter Sqdn., quickly moved to Itazuke, which was closer to the fighting. Originally built as long range escort fighters, F–82s had a phenomenal loiter time, and were capable of staying on station for hours. During the first month of the fighting, when it was still thought the Korean intrusion might be a prelude to all-out war between the U.S. and the Soviets, P–82s put in long hours on combat patrol.



While outnumbered ground commanders in Korea complained about second rate and inadequate equipment, the four main fighter groups brought in from Japan, the Philippines and Okinawa did not want for munitions. More importantly, while some squadrons continued to fly the F–51, others transitioned to the new F–80. When their personnel became qualified and more F–80s became available, pilots flying F–51s were rotated through the squadrons to train on the new jetfighter. This F–51 is seen with its typical load, two bombs/four rockets.



Above: Because of their endurance, firepower and radar capability, F–82s remained in service for much of the war. Here, an all weather, gloss black F–82G from one of the three squadrons in Fifth AF which flew the aircraft, is shown during a night interdiction mission over the north in the fall of 1950. Night missions with F–82s began on third day of hostilities and were very successful, eventually compiling 1,868 sorties and claiming 24 victories, four of them in air-to-air combat.

Left: F–82 was not replaced in Korea until the arrival of the Lockheed F–94 Starfire. With standard 110-gallon drop tanks under the wing, F–82G had a range of 2,400 miles. This one, *Black Jack*, is shown at Johnson AB, Japan, in the late summer of 1950, after logging combat time over South Korea, where it operated from Itazuke. (Walt Gartner)

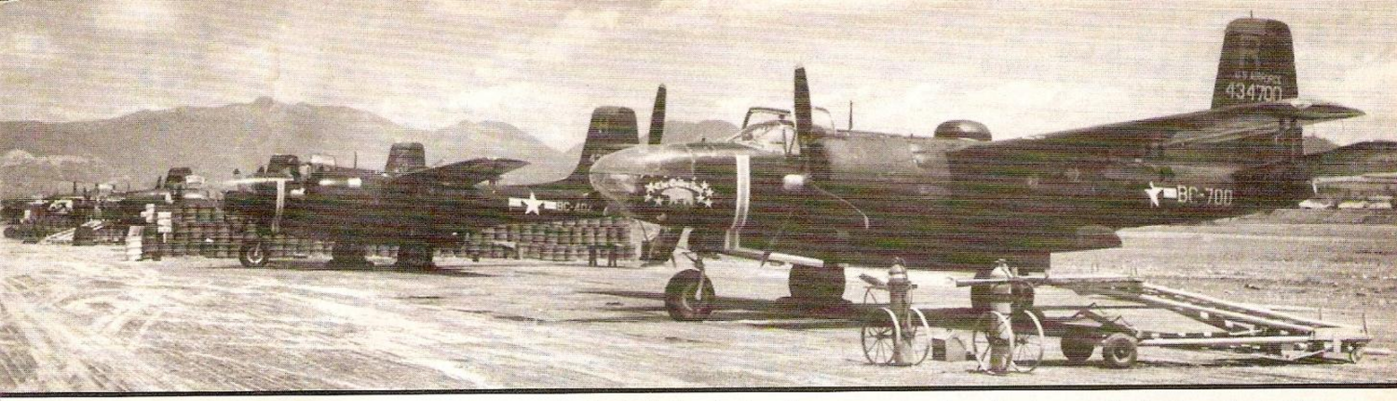
During those chaotic early days the performance of our armed forces was dismal. Poorly equipped, badly trained and, all too often, indifferently led by overage officers, outnumbered U.S. soldiers were driven back into a small perimeter on the southern tip of the Korean Peninsula by a well equipped North Korean Army, whose strength and capabilities had been badly underestimated.

There, under the tough and able leadership of General Walton Walker, they were just barely able to hold on and build up a reserve of men and supplies. Meanwhile, overall theater commander, General Douglas MacArthur, was preparing his masterful, behind the lines landing at Inchon, which caught the North Koreans completely by surprise, cutting off their armies in the south and forcing them into a hasty retreat. During the fall of 1950, UN forces advanced steadily northward, beyond the 38th parallel that separates North from South Korea, capturing the North Korean capital of Pyongyang, before moving up to the Chinese border.

According to MacArthur, the war would be over by Christmas. He also prophesied that the Chinese Communists would not join the fighting. He had miscalculated. Badly. UN forces were already overextended and thinly spread, when the Chinese struck in overwhelming numbers, and it was only through the stubborn heroics and vigorous resistance of the troops on the ground, combined with superb close air support by Navy, Marine and Air Force planes, that MacArthur's 8th Army was successfully extricated.

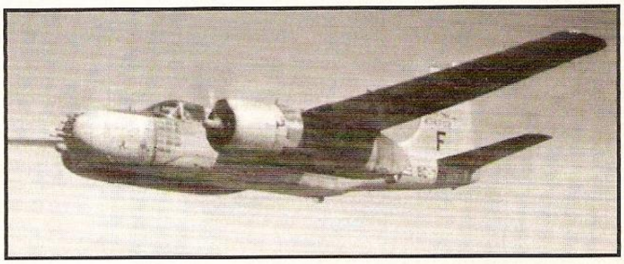
Politics now intervened. President Harry Truman and his chiefs of staff wanted to contain the fighting. MacArthur wanted to expand it, primarily by utilizing Chiang Kai-shek's Nationalist forces on Formosa. If necessary, he would also employ nuclear weapons. After a series of highly charged and generally heated meetings, MacArthur, who had previously warned against getting involved in an Asian land war, was removed and replaced by General Matthew Ridgeway.

The Communist drive south was eventually halted. By



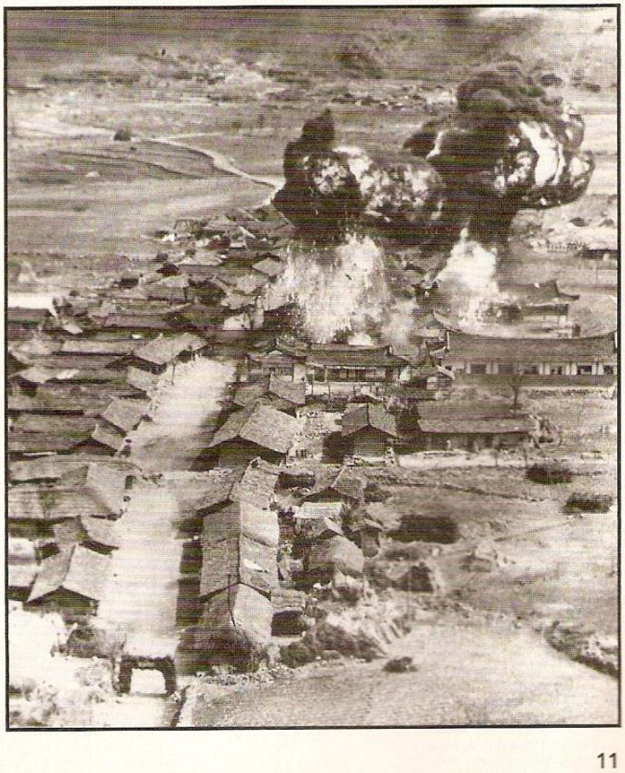
During the first months of the war, with UN forces being pushed back all along the line, the most urgent need was for air support to slow down the invaders and cut their lines of supply. Shown here are night intruder hunter-killer B–26Cs operating out of Pusan in 1953. With one plane carrying radar and the other the required weaponry, the pair would team up to destroy enemy supply vehicles and troop concentrations. But in 1950, all that was in the future, there being but one light bomb group, the 3rd, equipped with B–26s, and one medium, the 19th, with B–29s. The 3rd was an all veteran unit, although they were short one squadron, due to budget cuts. Within five days of the invasion they were in action and continued to fly combat for three years, taking part in both day and night missions.

A 3rd Bomb Gp. B–26B taxiing at a Japanese base after an August, 1950 mission, its wing racks for rockets or light bombs empty. For ground attack, B–26 was armed with up to fourteen forward firing machine guns, two 110 lb. napalm canisters, eight 5-inch wing rockets, and up to eight 250 lb. bombs. For night missions, in addition to eight wing-mounted .50 caliber machine guns, a glass nosed B–26 could carry four 500 lb. bombs externally and fourteen 240 lb. fragmentation bombs in its internal bay. If rockets were also carried, only two 500-lb. bombs were mounted beneath the wings.



With an overworked 3rd Bomb Gp. flying day and night, a second unit, the 452nd, was activated in July. Personnel received 60 days of accelerated training at George AFB, outside Victorville, California, while their planes were reconditioned. The four squadrons began their 33-hour flight to Japan, arriving on October 26. One day later they flew their first mission. In March, they transferred to the Korean mainland, where the 3rd and 452nd divided the target lists, the 3rd taking western Korea, the 452nd concentrating on the east. Here, a B–26B from the 452nd is shown returning from a 1951 mission over North Korea's capital, Pyongyang.

Above: Another mission for the crew of *Sterile Carol*, a 452nd B–26C of the 728th Bomb Sqdn. based at Pusan East (K-9) in 1951.



Right: And just what type of work did the crews of the 3rd and 452nd Bomb Groups do? Here's an example: a low-level attack on suspected housing used by enemy railroad repair crews. These usually worked all night repairing the damage done by other B–26 units and often slept near major junctions, where their rest was interrupted by unwanted visitors burning them with flaming napalm.

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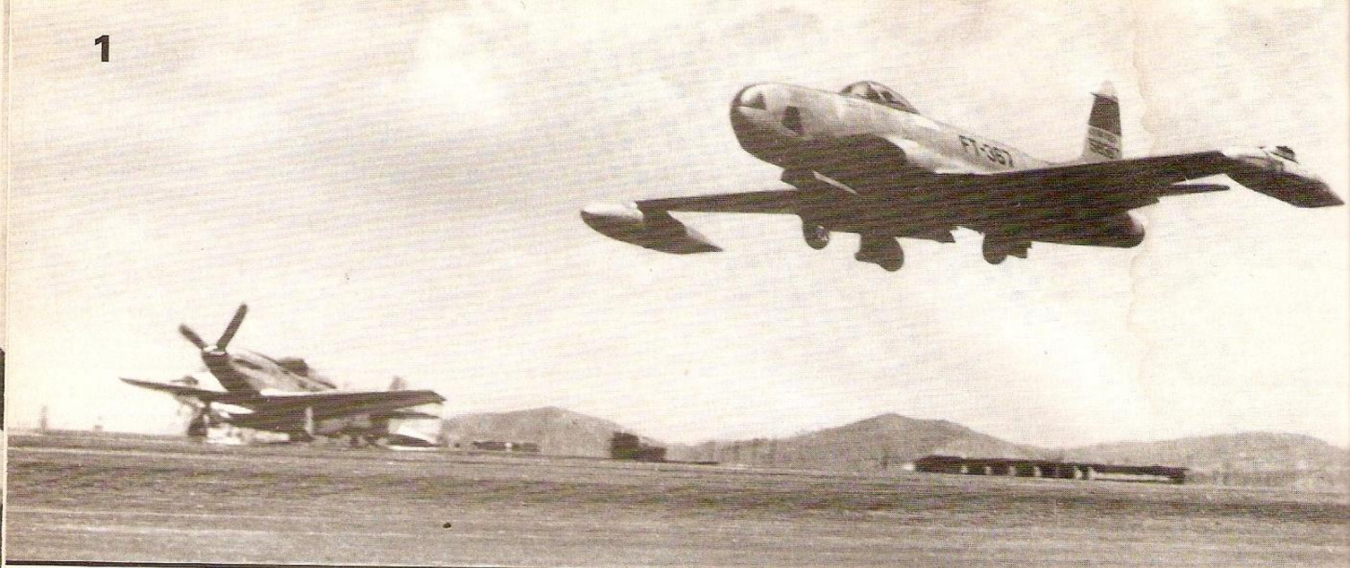

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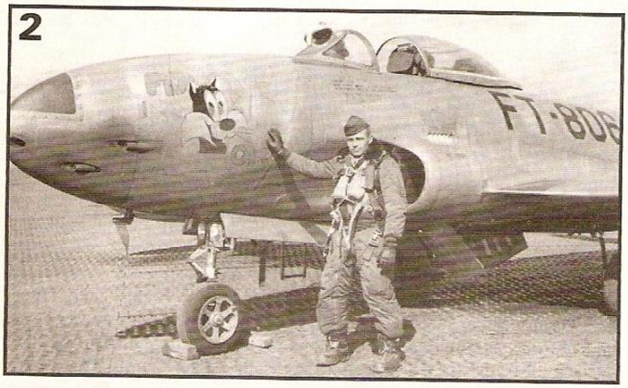
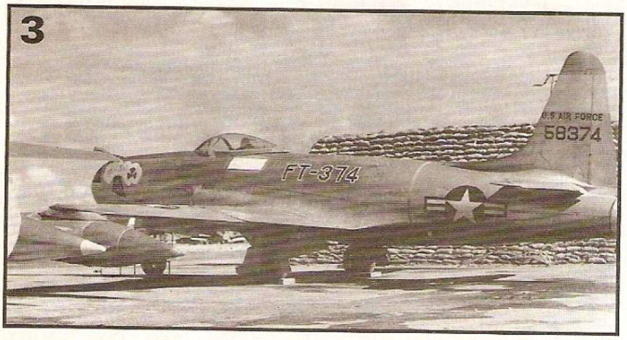


1. A lone RF-80 lifts off from Kimpo AB, just south of Seoul, the recaptured capital of South Korea, for a recon mission over the north. RF-51 in background was assigned to the 45th Tactical Recon Sqdn. Once the RF-80 is airborne, a flight of F-86s will take off to provide top cover as, without protection, RF-80s were extremely vulnerable to MiG attacks.

2. Fully dressed for cold weather, an F-80C pilot from the 36th Fighter-Bomber Sqdn., 8th Fighter Group, based at Suwon, prepares for a mission early in 1952.

3. When more F-86 fighters reached the theater, America's first combat jet, the F-80, was gradually shifted to fighter-bomber and reconnaissance duties, and the hardworking P-51s began phasing out. Here, an RF-80A of the 15th Sqdn., 67th Tactical Recon Wing, sits in a well-buttressed revetment at Kimpo in the summer of 1952. Recon missions flown by RF-80s were some of the war's most hazardous, since the pilots were up in MiG Alley and unarmed.

3



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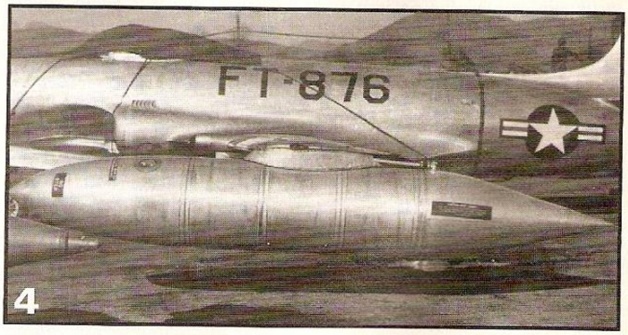

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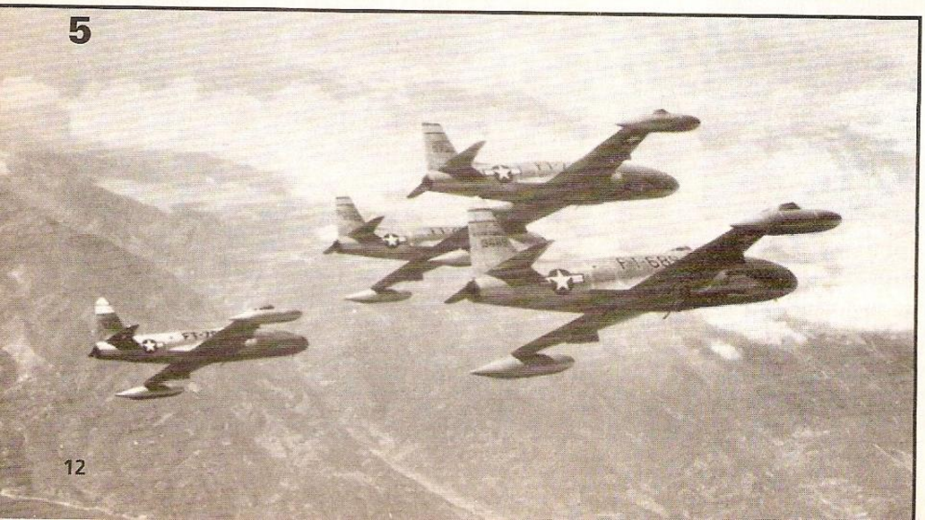


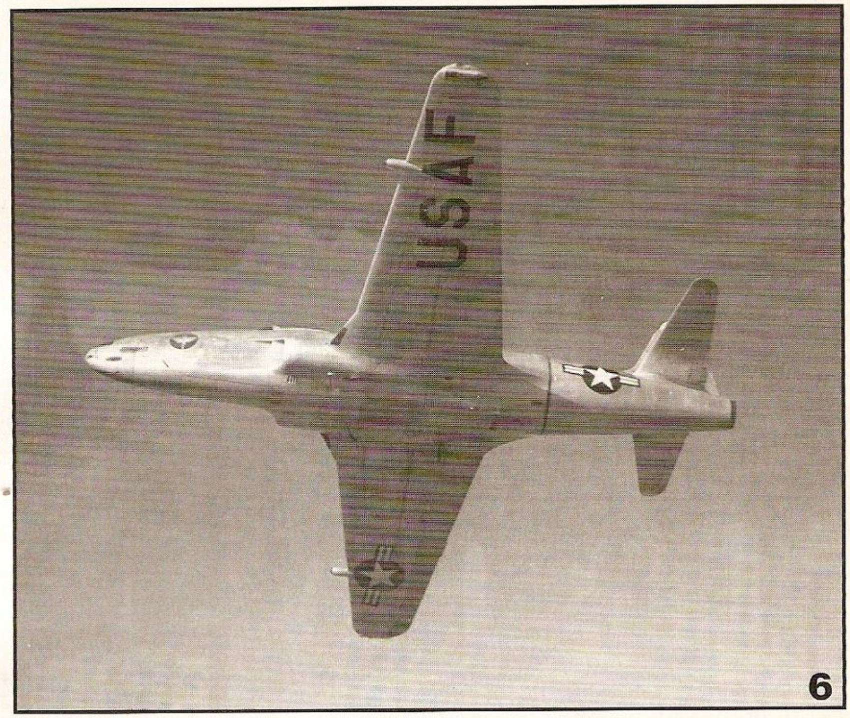
4. Range was never the F-80's strong suit, so two 49th Gp. pilots, Lt. Robert Eckman and Lt. Ed Johnston, remedied the shortcoming. While stationed at Misawa AB, Japan, they inserted three middle sections between the ends of the original wingtip tanks, essentially elongating them and increasing endurance by a full hour. In this photo the additional two center sections are clearly demarcated, the resulting modification being named after their place of origin: Misawa AB.

5. When war in Korea erupted, some of the key defenders in the area were these F-80s from the 35th Fighter Interceptor Wing stationed at Johnson AB in northern Japan, considered a far more critical and important target for aggression then the peninsular nation to the west.

6. Dependable and uncomplicated, some 1,731 P–80s were built in three major versions. With a top speed between 540 and 570 mph., America's first jet was at least 50 mph. slower than the MiG–15. It also had a slower rate of climb and a lower service ceiling. Nevertheless, its pilots claimed 31 aerial victories against 14 losses in air-to-air combat, and workhorse F–80s were credited with over 98,500 combat missions, in which they dropped 41,500 tons of bombs and fired over 81,000 rockets. In addition to 14 F–80s shot down in air-to-air combat, 150 more were destroyed in operational accidents, with another 113 succumbing to antiaircraft fire.

7. Lugging its longer Misawa tip tanks into the air, this 9th Fighter-Bomber Sqdn. F–80C, based at Taegu, in south central South Korea, is armed with four 5-inch rockets for an attack on enemy trucks during support mission for the 1st Calvary Division in bitter September, 1951, fighting.

8. Another F–80C from the 7th Fighter-Bomber Sqdn. taxies out for a mission during fighting at Taegu. Severe battles were fought there in the summer and fall of 1950 and again in 1951, the first when General Walker's troops were pushed back into the Pusan Perimeter, the second when they broke out, after General MacArthur's surprise landing at Inchon in the north, and the third during heavy Chinese attacks.



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December, 1951, fighting had settled down along a line of fairly fixed positions, which the Chinese and North Koreans would attempt to storm in human wave attacks and the American-led UN contingent would try to hold, while inflicting maximum casualties. After the death of General Walker in a jeep accident, James Van Fleet became field commander of the 8th Army under Ridgeway, and through a combination of carefully planned offensives with limited objectives, and stonewall defensive stands on well chosen ground, he was able to inflict horrendous losses on his foes.

The war in the air had also been transformed. From an undermanned, grab-bag aerial contingent of harried flying firemen, attempting to slow the surging Communist forces with obsolete planes – and not enough of them – U.S. air forces slowly began developing well crafted, close support missions that covered limited offensive thrusts, or kept key defensive positions from being overrun. Gradually, and painfully, our airmen gained control of the air above the battlefield, allowing them to completely interdict enemy supply routes and transport, before going over to an all-out offensive bombing campaign. With the arrival of the North American F–86 Sabre jet in the late fall of 1950, UN forces had been able to first gain, and then maintain air superiority. While the Communists had an 800-plane air force at their disposal, they seemed loath to risk it. In was only in the far north, in so-called MiG Alley, that they were willing to challenge UN raids, and since U.S. planes were forbidden to cross the border into China, the MiGs were able to establish a sanctuary beyond the Yalu River, separating Chinese Manchuria from North Korea.

From there, they would attack U.S. B–29s and F–84s bombing northern targets near the border, but they never launched a major strike of their own. One reason why may have been the 10-to-1 ratio of victories over defeats, which F–86s inflicted on the Soviet-built MiG–15 fighter.

In the course of the fighting the U.S. military was trans-

9. Just as the F–80s relieved the F–51s, so did a second generation of jetfighters, in the form of the North American Sabre, replace Lockheed's F–80. But airbases in South Korea were so crowded in the winter of 1950-1951 that only two of the three squadrons from the newly arrived 4th Fighter Wing could be accommodated at forward airstrips. With an F–80C in the foreground, assigned to the air defense of the Tokyo area, a lineup of F–86s on the Johnson AB flight line waits for orders to Korea.

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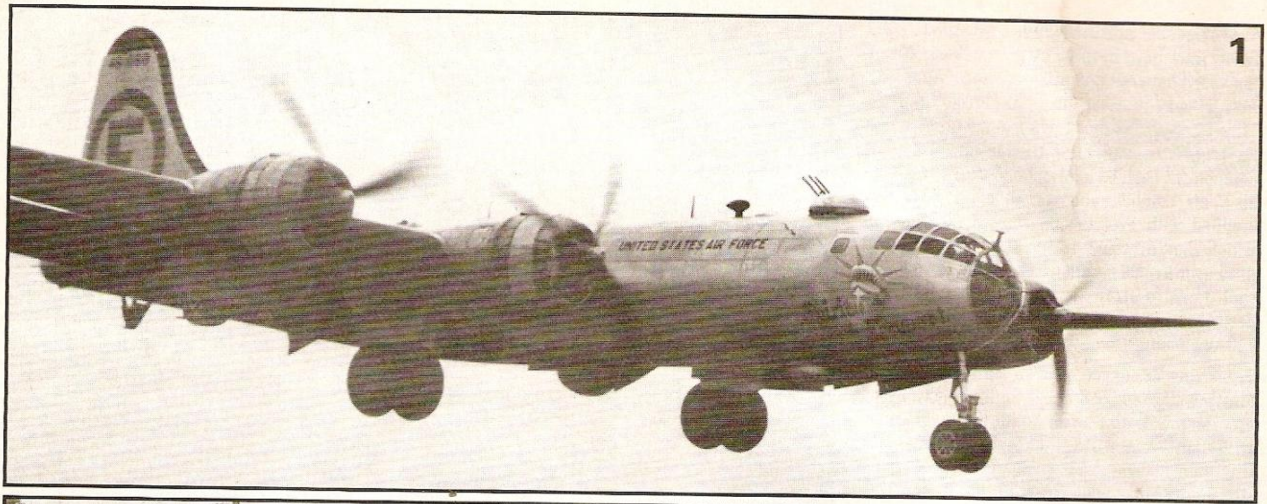

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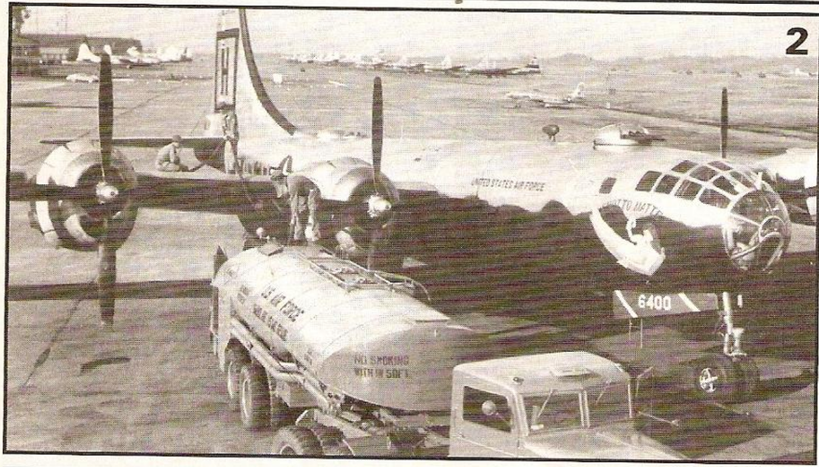

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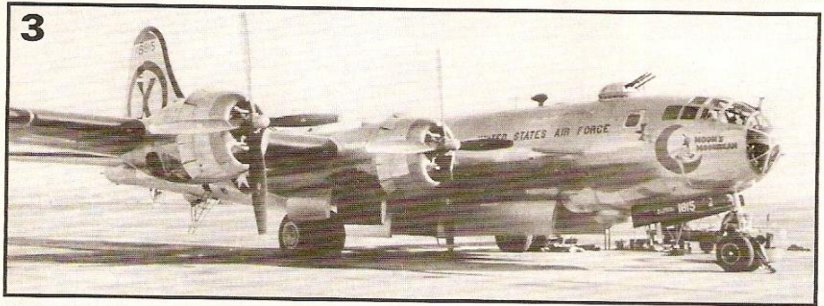

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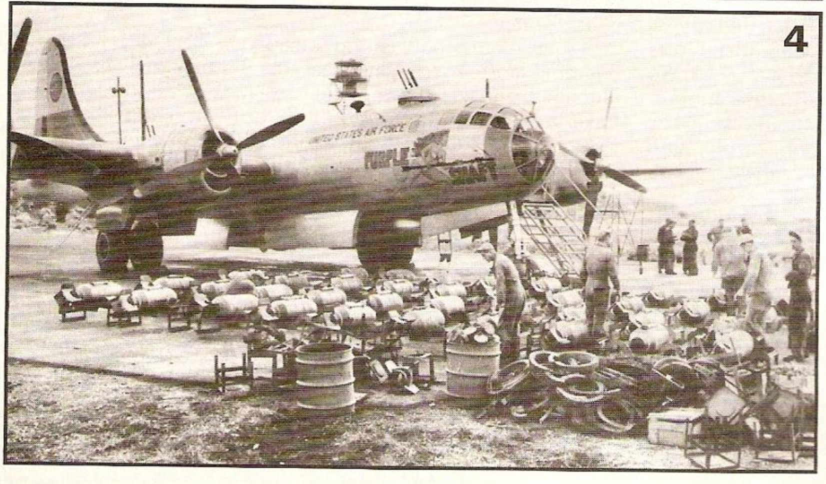

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1. The Korean War was just hours old when the 19th Bomb Gp. – medium – was ordered to move its B–29s from Guam to Okinawa's Kadena AB for action against enemy forces attempting to cross the Han River bridges leading to Seoul. Dispatched either singly or in cells of three, the B–29s pounded targets as far north as the enemy capital of Pyongyang. Here, *Spirit of Freeport* returns from a mission.

2. Using Shoran navigational radar to locate targets and find aiming point for drops, B–29s also employed six-ton Tarzan radio-controlled bombs. Normal bomb load was forty 500-lb. bombs. This B–29A is being refueled in Japan for a later strike during December, 1950, when, after a drastic miscalculation by the American high command, Chinese troops swarmed over the border threatening to cut off General Ned Almond's 10th Corps and annihilate U.S. and ROK units that had penetrated deeply into North Korea.

3. In addition to bombing, B–29s also were used for long range strategic recon. Here, *Moon's Moonbeam*, an RB–29A, is serviced at Yokota, Japan, for such a mission.

4. B–29A from the 93rd Bomb Sqdn. loads up with twenty 500 lb. general purpose bombs at Kadena AB, Okinawa. If flying from the Japanese mainland, the load would be doubled.

5. Ace-maker of the Korean War was North American's F–86 Sabre. It looked good and flew better. All 39 USAF aces of the war did their job in the F–86. Their early models were the F–86A and E, equipped with six .50 caliber machine guns. Two groups, the 4th and 51st, were the first to arrive beginning in November, 1950, and were soon followed by the 8th, 18th and 58th Gps. In all, Sabre pilots claimed 814 victories, 792 of which were MiG–15s, for a loss of just 78. Unlike later F–86s, the A model did not have an all-flying tail and only 554 were built. The F–86E was similar; 426 were completed and maximum take off weight rose by 1,600 lbs. to 17,800 lbs. Shown here is an F–86A from the second production batch of three, with rocket and machine gun armament laid out before it and on its flanks. External tanks have a capacity of 120 gallons.

6. A model Sabres also flew recon. Eleven were modified for that mission, one of which is shown with an RF–80, both belonging to the 15th Tactical Recon Sqdn. They are fitted with long range tanks.

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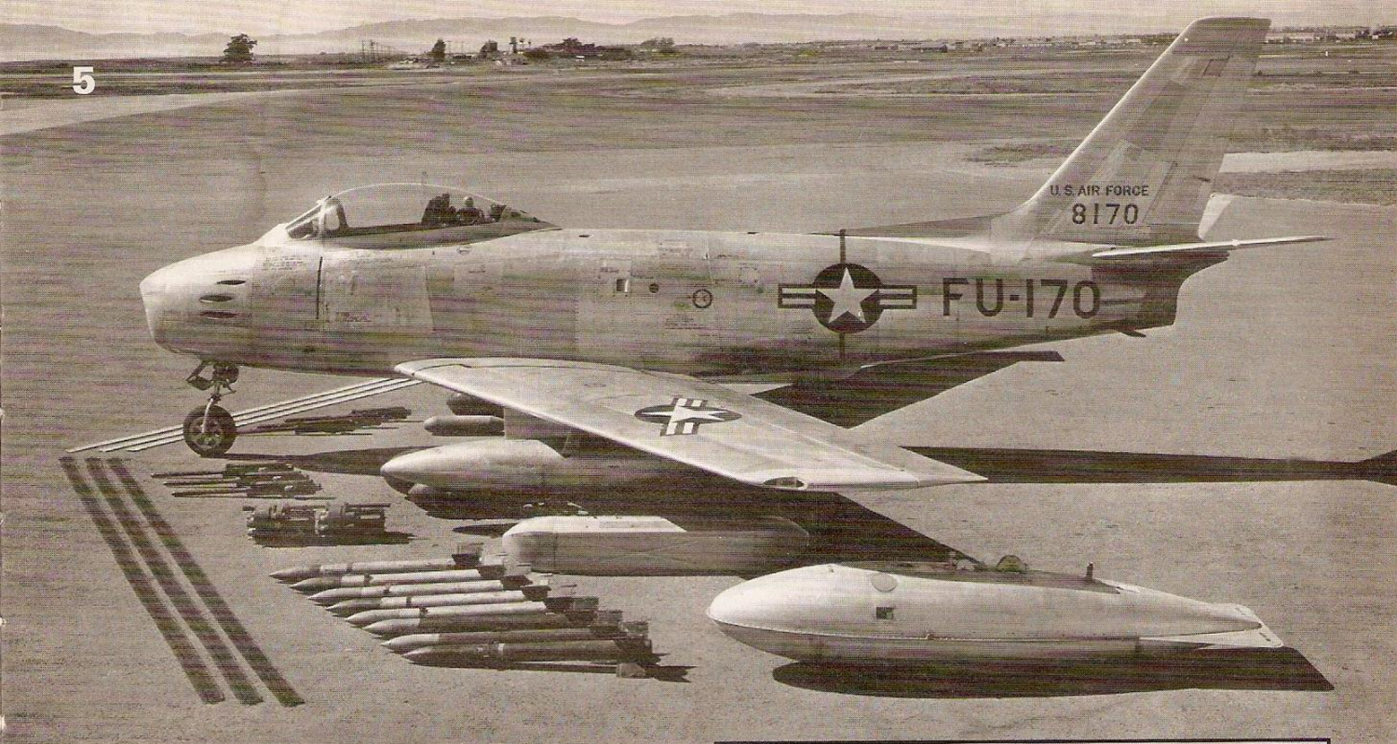

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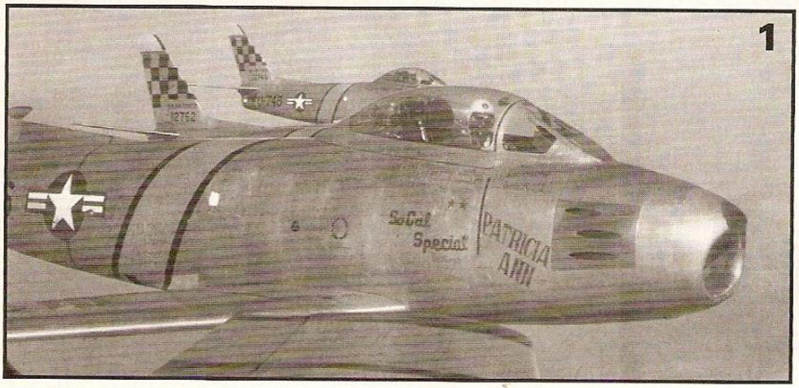
7. A blue-trimmed F–86A belonging to the 16th Fighter Sqdn., 51st Interceptor Wing, based at Suwon, South Korea at war's end.

8. In the fall of 1951, Far East Air Force converted its 51st Wing from F–86As to the improved F–86E. It is shown here with leading edge slats deployed and mid-fuselage air or dive brakes out. Last model used in Korea was the F–86F with a two-ft. longer span and a maximum take off weight of 20,600 lbs. Some 2,540 were built.

formed from as essentially inept, unprepared, peacetime force, frequently officered by deadwood, to a razor sharp fighting machine, in which the air arms, both Navy and Air Force, grew especially powerful. Cooperation between forward controllers and close support aircraft reached new heights of collaboration. Large-scale air resupply and evacuation of wounded became routine. Fighter-bomber missions were regularly and successfully flown over an area in which bad weather was the norm. Battlefield interdiction turned into a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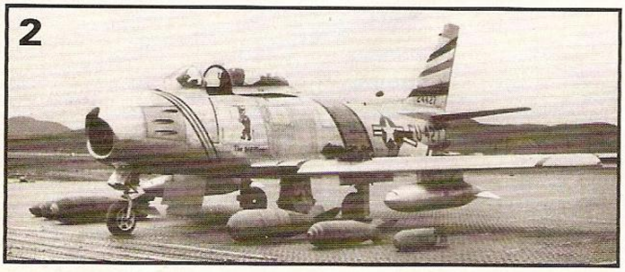
1. These 51st Fighter Wing, 16th Fighter Sqdn. F–86As, with their distinctive checkerboard tail markings were photographed south of the Yalu River in 1952. They are about to spread out in tactical formation while maintaining speed, a vital necessity when flying over MiG Alley. By this time, Sabre flights had been expanded from four to six planes, in order to meet the threat of increasingly large numbers of enemy jets.

2. Like all workhorse U.S. fighters before it, the F–86 also became a fighter-bomber. Here, an F–86F is seen shortly before truce was declared in the summer of 1953. It was flown by the CO of the 8th Fighter-Bomber Gp. stationed at K-13, and exhibits various alternate weapons loads, from light 250 lb. bombs outboard, to 500 lb. bombs and, inboard, 1,000 lb. bombs.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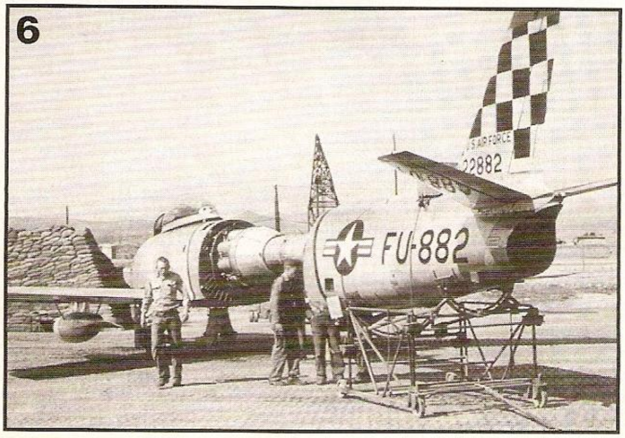
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3. When the F–86 was first rushed to Korea in the fall of 1950, it went into combat immediately. As more Sabres arrived, so did full factory field support. Here, longtime North American test pilot, Bob Hoover – in cap and parachute – confers with tech rep on the K-13 flight line. Second aircraft was a former world speed record holder.

4. Suwon AB, South Korea was a principal station for F–86s, complete with sandbagged revetments and PSP, or Marston Mat. These F–86Es are from the 24th FIS of the 51st Fighter Wing, and are shown three months before truce was signed.

5. Since their own J-47s generated nearly ten percent greater thrust, the newly arrived F–86Es did not usually fly combat with earlier A models, and flights did not operate mixed equipment, although the planes might be assigned to the same squadron. These belonged to the 4th Fighter Wing stationed at K-14 in the fall of 1951.

6. Engine change on an F–86E. This Sabre was assigned to Lt. Hank Buttleman, who became the war's youngest ace, shooting down his fifth MiG on June 30, 1953, at age 25. He would end the war with seven MiG 15 victories while flying with the 51st Fighter Wing.

7. America's first jet ace was Major James Jabarra of the 334th Sqdn., 4th Fighter Wing. He eventually shot down 15 MiGs, adding to his World War II tally of 1.5 victories. On May 20, 1951, despite having a drop tank hang up beneath his wing, he still downed two of the enemy.

8. Captain Cecil Foster of San Antonio, Texas scored nine victories in Korea, three of them in three days, while flying with the 51st Fighter Wing during the fall and winter of 1952. His F–86E is shown at K-13 strip near the border between North and South Korea.

specialty and, as it had in the war against Japan, less than five years before, carrier air strikes again proved how mobile and versatile the Navy's aerial potential could be. Helicopters proved an efficient source of transport and successful Air-Sea rescue grew not only ever more sophisticated and rapid, but almost expected.

However, it was in the fighter duels between the USAF'S F–86 and the Soviet MiG–15 that the underlying air victory of the UN was bought and paid for. The arrival of the MiG–15 shocked the U.S. Not only did it have a higher altitude capability than the F–86, it was also slightly faster above 35,000 ft., turned more tightly, climbed better, and although lighter, was more heavily armed, with one 37mm and a pair of 23mm weapons in the forward fuselage, versus the F–86's six .50 caliber machine guns.

(Text continued on page 20)

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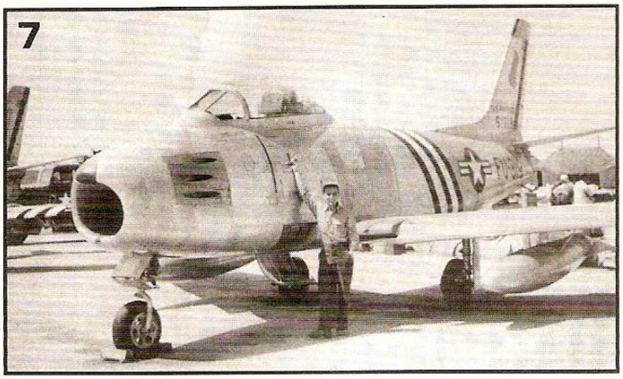

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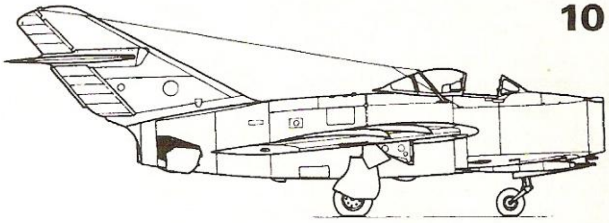

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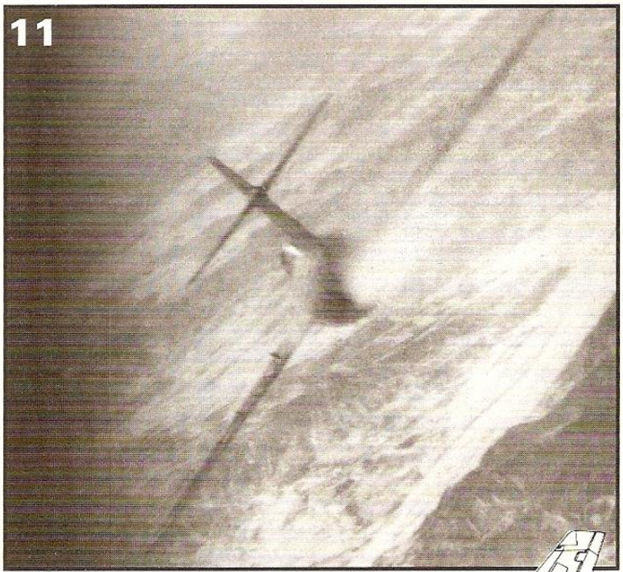

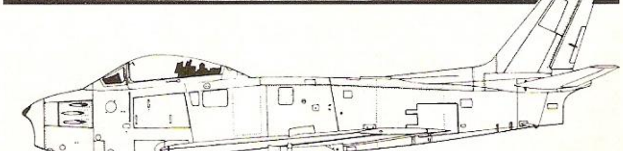

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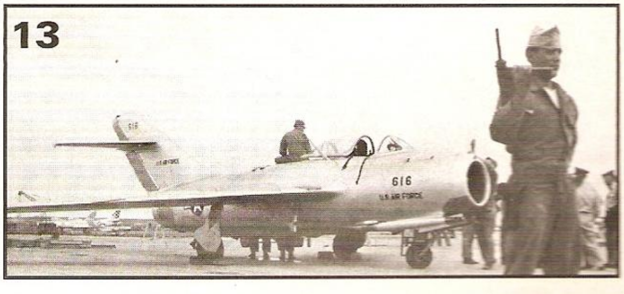

9. The 4th FIS Wing (it began as a group and was enlarged to a full-sized wing) accounted for approximately 60 percent of the nearly 800 MiGs shot down in Korea during the unit's two and one half years of combat.

10. MiG–15.

11. With the diagonal of the frozen Yalu River cutting through the snowcapped mountains separating North Korea from China, below its tilted wings, a Soviet-built MiG–15 succumbs to a burst of .50 caliber fire rammed up its tailpipe, smoke already billowing from its engine. Although the Soviets used Korea as a training ground for their own, as well as Warsaw Pact satellite fighter pilots, all were handled by the F–86. Except for a handful of World War II Soviet veterans, most MiG pilots were tentative and only willing to make a single pass at the outnumbered Americans. In many cases, fleets of MiGs flown by new pilots would remain at altitude, while their instructors tangled with the Sabres. When these instructors were shot down, the morale of their pupils plummeted. During the last six months of the war, the MiGs became more aggressive, but their losses continued to mount.

12. North American F–86E Sabre.

13. In October, 1953, after preliminary truce negotiations, a defecting North Korean pilot flew this MiG–15 to South Korea's capital. He was one of several thousand who went through the school at Antung, Manchuria, just across the border in China, where political decision forbade U.S. forces to venture, thereby giving Soviet-bloc pilots a sanctuary where they could train, free from attack, and then, when it suited them, strike American aircraft at will. MiG is already in U.S. markings and was flown by a number of U.S. pilots, who pronounced it inferior to the Sabre in both stability and dependability, although they liked its responsive climb and superior ceiling. MiG had several other shortcomings. Its armament was heavier, but the cannon did not carry much ammunition. Gun sights were gyroscopic, while the Sabre's was ranged by radar and much more accurate. The heavier Sabre dived better and when MiG–15 pilots attempted to follow at high speed, they frequently lost their tail assembly. Yet, MiG pilots had two big advantages. They usually met the F–86 when the Sabre pilots were low on fuel, with corresponding endurance much depleted, and they also outnumbered them. In early 1951 there were nearly 500 MiGs in theater and this rose to more than 1,000 by the end of fighting. During the winter of 1950-1951, there probably were no more than 150 F–86s available to U.S. forces, and at war's end the total of F–86s did not exceed much more than 500. However, the disparity in pilot skills between F–86 and MiG–15 was enormous. Witness the nearly 10-to-1 victory ratio of the former over the latter.

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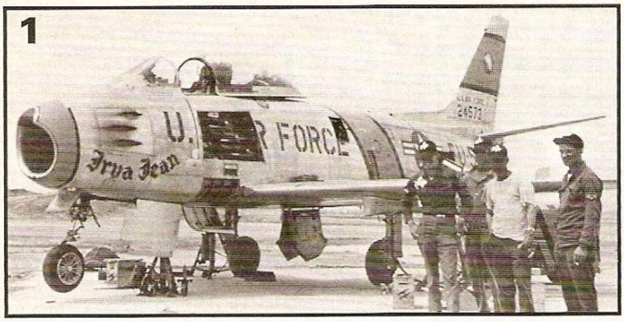

1. Even when the fighting ended, U.S. presence in Korea remained and still does to this day. In 1955, this 4th FIW F-86F was sent back to Korea for another tour and, during one of the frequent disruptions of a tentative truce, the wing's pilots shot down a number of MiG-15s which were interfering with U.S. reconnaissance flights.

2. Captain Richard Baker celebrates from the cockpit of his F-86, after his fourth victory in August, 1951. A few weeks later, in September, the 334th Sqdn. fighter pilot became an ace. (R. Baker)

3. The only USAF Tactical Recon Squadron to employ jets for all of its Korean tour was the "Cotton Pickers" of the 15th Sqdn. Later in the war, they began using a limited number of converted RF-86As, one of which is shown here, but still maintained a full complement of older RF-80s when this photo was taken at Kimpo in late 1952. (John Cowgill)

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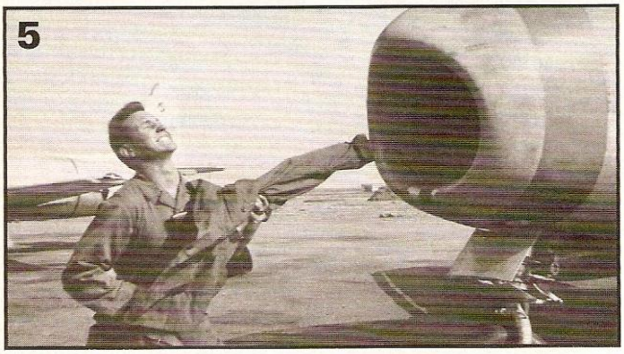

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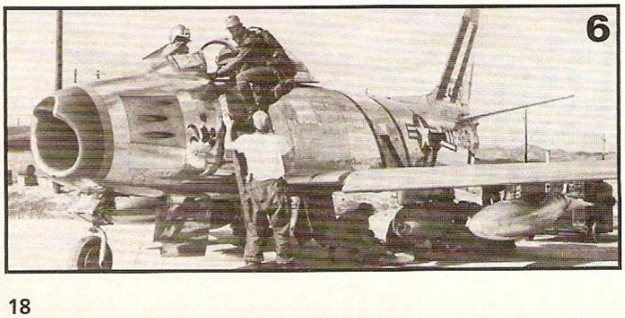

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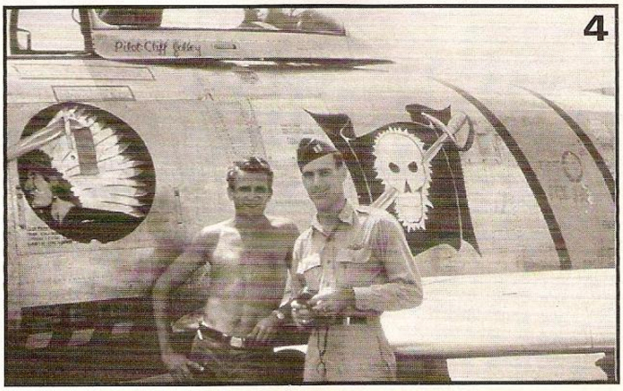

4. Captain Clifford Jolley, Cleveland, Ohio, had this photo taken shortly before he became the 18th jet ace of the war. He finished his combat tour with seven victories over MiG-15s and his 4th Fighter Wing, 335th Sqdn. F-86 was appropriately named "Jolley Roger." He is shown with his ground crew chief. (Cliff Jolley)

5. F-86s not only ate up MiG pilots, but also could be dangerous to bystanders who got too close when they were revving up their engines. Here, Sgt. Earl Brooks clowns in front of a Sabre's intake, as if the suction were pulling his jacket into the duct. Several such incidents resulted in the death of one ground crewman.

6. This newly arrived F-86F replaced older Sabres and even earlier F-51s in the fighter-bomber role in the winter of 1952-1953. It was based at Suwon, South Korea, and is being loaded with 500 lbs. bombs.

7. Although they did not play the same pivotal role as the F-86 Sabre, Republic's F-84 Thunderjet did enter the fighting beginning in December, 1950. The main model chosen was the F-84E series. A total of 843 were built as fighter-bombers, and were much superior in speed and load carrying to the earlier B, C and D versions. They also climbed better and had more endurance, and in the E, armament was raised from four .50 caliber guns to six. This straight-winged F-84 also retained the ability to tote 32 five-inch rockets, or 4,500 lbs. of bombs, the latter an alternative bomb load that was not part of the aircraft's capabilities in its first three models. Later in the war it was joined by the similar G, of which more than 3,000 were built, the fastest of the straight-winged F-84s, with a top speed of 622 mph. A flight of Gs from the 474th Fighter-Bomber Gp. is shown on its way to North Korean targets.

8. Republic F-84G.

9. In addition to having more power, the F-84G was also the first U.S. tactical fighter to be equipped for carrying nuclear weapons, and the first capable of in-flight refueling. In the summer of 1952, Colonel Dave Schilling, who had commanded the 56th Fighter Gp. in World War II, where he scored 22-1/2 victories, took the 31st Fighter Escort Wing from Turner AFB, Georgia, to Misawa AB, Japan, demonstrating the new fighter's endurance during a flight of nearly 11,000 miles. He is shown here taxiing in at the end of that flight, his aircraft carrying four external tanks and a special radio antenna mounted ahead of the cockpit for long-range navigation and communication.

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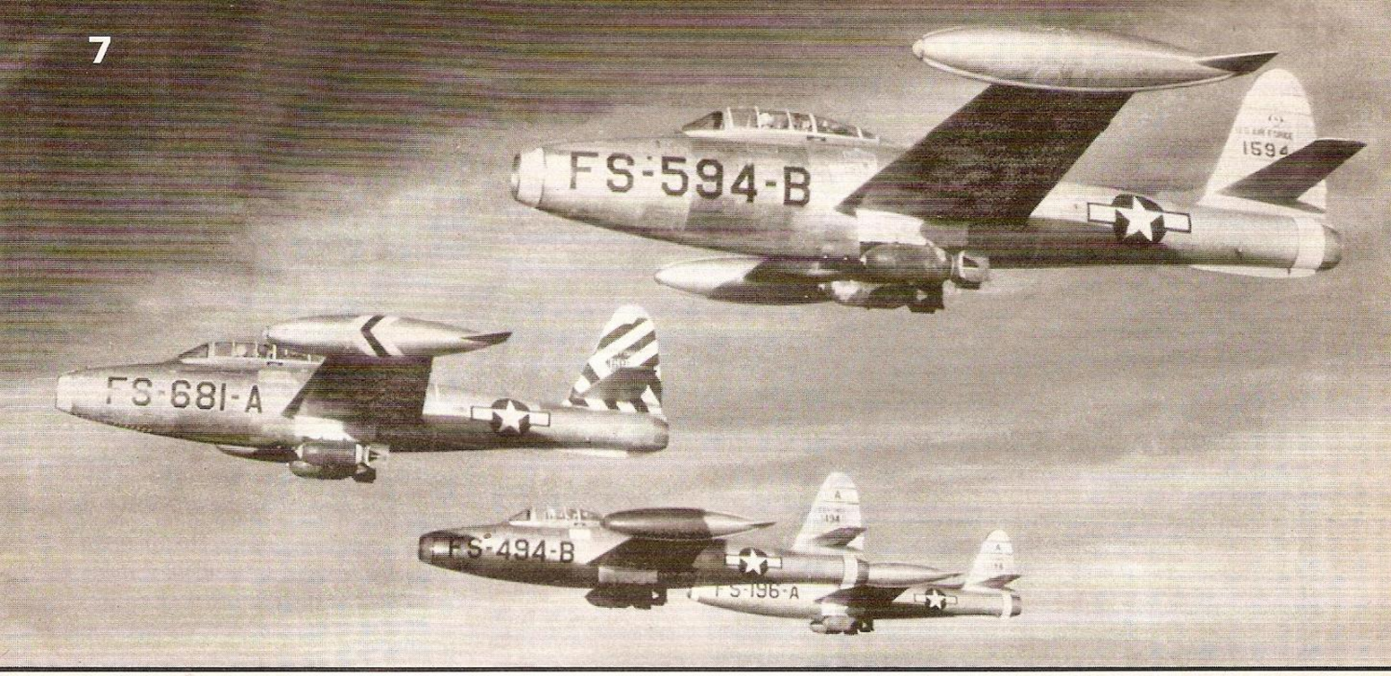

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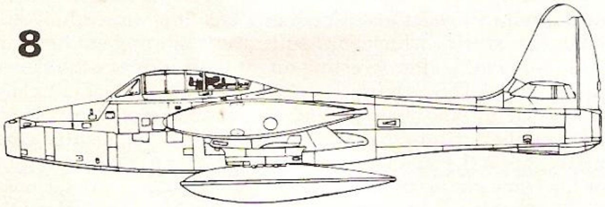

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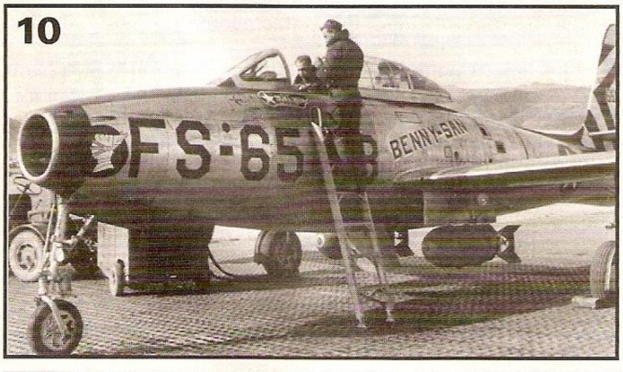

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12. A flight of 49th Gp. F–84E fighter-bombers from the 8th Sqdn., each plane carrying a pair of 500 lb. bombs.

13. Cost of an F–84E was approximately $300,000 in 1951. This included airframe, engine, and electronics – less than $5,000 – and nearly $40,000 worth of armament.

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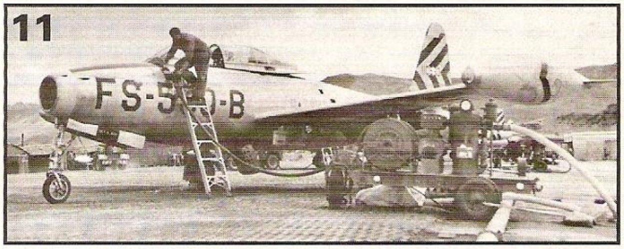

10. Captain Ken Skeen, flying with the 9th Sqdn. of the 49th Gp. – the second F–84 unit to arrive in Korea – scored the first of his unit's kills over a MiG–15 on Sept. 19, 1951. Marking already appears on the forward fuselage, above the number 6 on his F–84G, as he prepares for another close support mission. G model could be distinguished from the E by heavily braced canopy.

11. Three full groups of F–84s were in Korea by 1952, among them, the 58th. Here, one of its F–84Gs from the 310th Sqdn. sucks up JP-4 jet fuel from pipes linked to a portable generator and pump at Taegu's PSP hardstand. Another big difference between early F–84s and the E and G models was the big increase in fuel capacity, from just 786 gallons to 1,372 gallons, carried internally and externally, which increased maximum take off weight by more than a ton and a half.

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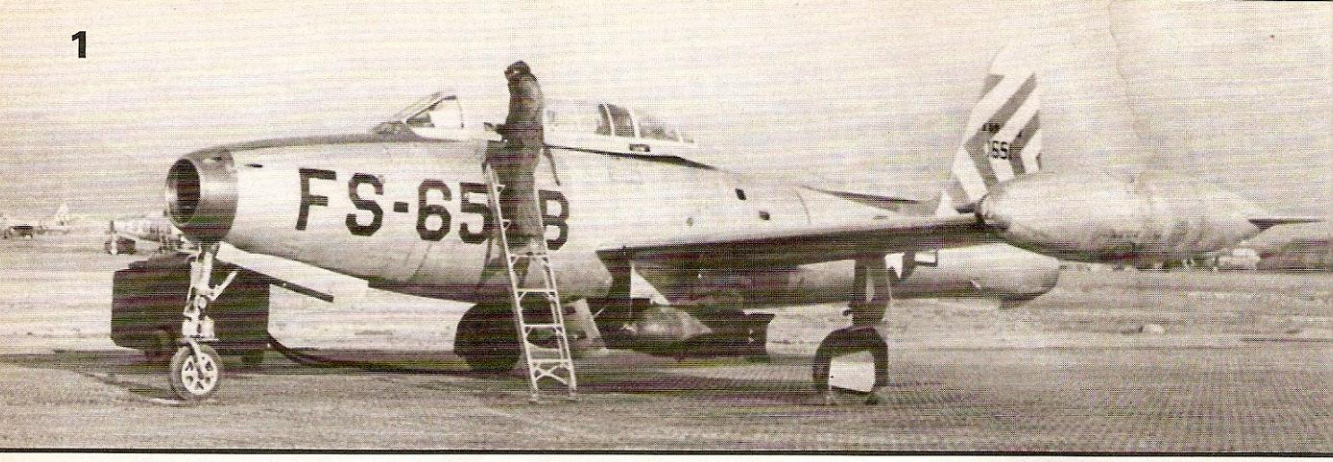
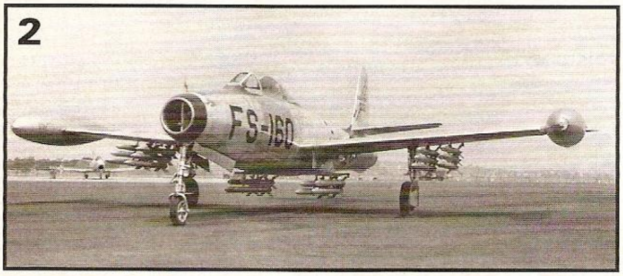
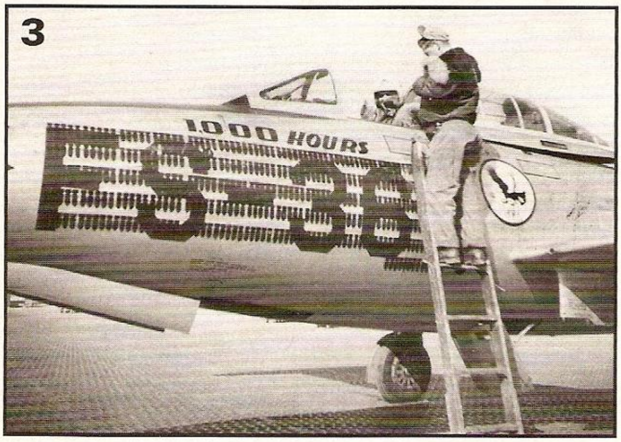


1. Workhorse fighter-bomber in Korea was F–84. With a top speed of 622 mph. at sea level, and a combat radius of 800 miles with a full load, it was able to hit targets in the distant north and still hold its own with MiGs at low altitude. This G is loaded with a pair of 1,000 lb. bombs.

2. F–84E with the fighter's typical rocket load of 32 five-inch weapons.

3. Another mission completed for a total of 1,000 combat hours on this F–84G from the 182nd Sqdn. of the Texas Air National Guard. The ability of Guard pilots to reinforce regular USAF and reserve squadrons was key to U.S. air victory in Korea, a precedent that has been maintained through more recent actions over Iraq and Kosovo.





But the MiG wasn't as stable at speed, and it also had a tendency to snake. Under violent, high speed maneuvering, it would often snap roll, spinning out of control, and this inbred trait of directional instability made it an inferior gun platform. By contrast, the F–86 was much more controllable, stable, comfortable, and better built. More importantly, its pilots were far better trained.

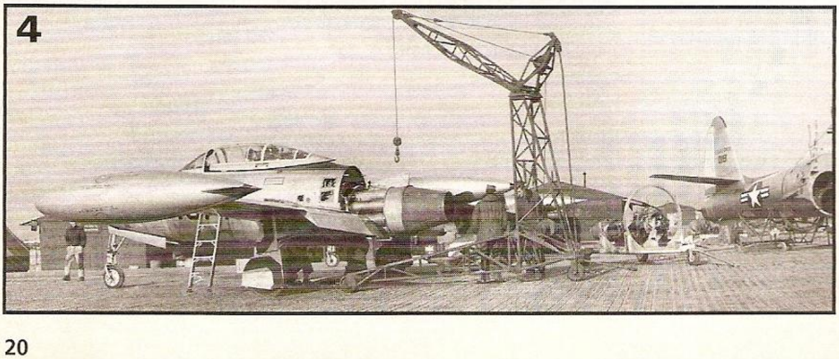
Considering the number of MiG–15s available to Communist forces and the relative merits of that fighter, which were considerable, the enemy should have been able to overwhelm UN air forces, gradually grinding down the F–86 defensive shield, which MiG squadrons outnumbered nearly two-to-one and, after wresting air superiority from the Sabre pilots, attack U.S. ground forces at will. But the Communists chose not to take that gamble, for whether flown by North Korean pilots, Chinese pilots or Soviet pilots, the results were pretty much the same – nine times out of ten, the F–86 pilot or his Navy counterparts in F9F Panther jets were victorious.

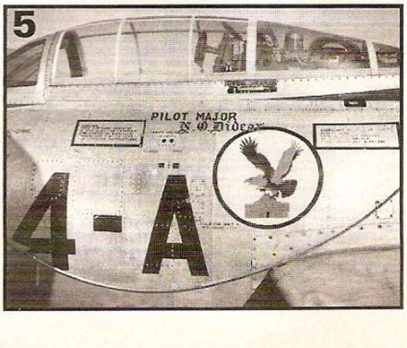
That undeniable fact, and the growing power and capability of U.S. airpower after 1950, tipped the balance in the air, which in turn decided the outcome of the battle on the ground.

The large Communist fleet of World War II-type piston engined aircraft was never a serious factor in the Korean airwar. On the other hand, old retreads like the USAF's P–51 Mustang, once the ultimate long range escort fighter, soon became a close support fighter-bomber champion during the first full year of fighting. In this it was ably aided by the Navy's Vought F4U Corsair, operating from carrier decks as well as primitive, pierced-steel-plank (PSP) airstrips all over

4. Cold weather at Taegu forces ground crews to button up, but maintenance on these F–84Gs from the 49th Fighter-Bomber Gp. continues without letup. Although straight-winged F–84s were often called mechanics' nightmares, engine change was rapid and straightforward.

5. An aroused eagle poised over the Alamo was the 182nd Squadron's Texas Air Guard symbol. G model F–84 was assigned to unit's CO, Lt. Col. Nowell Didear. It formed a portion of the replacements for the 27th Fighter Escort Wing, the first Thunderjet organization to arrive in Korea with F–84Es in December, 1950.





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6. It was cold in Korea, and still is, only today, in place of a rudimentary, almost primitive infrastructure, South Korea boasts modern, highly sophisticated facilities. Here, F–84Gs from the 49th Gp. – the second to reach the country – sit on an icy, snowbound field, their flying surfaces protected with canvas.

7. Another view of an F–84 from the same group based at Taegu in January, 1952. Note that it is loaded with bombs and will be ready to fly its mission, weather permitting.

8. Snow flurries attempt to blot out this RF–51 from the 45th Tactical Recon Sqdn. in the winter of 1950-1951. In addition to Mustangs performing tactical recon, forward air controllers flew T–6s to report on enemy activity on the front or bomb line.

9. The Marines also contributed to ground-based close support missions, particularly with these AD Skyraiders. In order to keep the bores of the 20mm wing cannon from freezing at high altitude, ground crews cleaned them with metal rods first soaked in mosquito repellent, and it worked. Note cold weather gear and gloves worn by both maintenance men.

10. Shivering on land, freezing at sea, winters in Korea could be cruel. Here, deck crews sweep the snow from the *USS Valley Forge's* flight deck, the day after Christmas, 1951. They'll have a harder time stripping the rime ice off the fuselages of VF-52's F9F Panther jets.

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Korea, most of which were only identified by numbers, prefixed by the letter K, for Korea.

They were, in turn, reinforced by the newly arrived and more powerful Douglas AD Skyraiders, operating in the same manner, Grumman F9F Panther jets and, to a far lesser extent, McDonnell F2H Banshees, used primarily as fighter-bombers. The first Air Force jets had been the Lockheed F–80. During the critical first four months of the war, outgunned and frequently forced to move from their marginal bases, they flew over 15,000 sorties, slowing the North Korean advance, and in November, 1950 an F–80 engaged in the first jet vs. jet encounter, downing an MiG–15 while flying escort for B–29 bombers.

A number of older World War II aircraft also saw significant fighting. The prop-driven Douglas B–26 Invader became both a day and night attack plane, playing a major role in sealing off the battlefield and cutting Communist supply lines. (For full story of B–26 in Korea see February *Wings* 1993 and 1994, available in back issue.) The new Republic F–84 jet also made solid contributions. Both the improved D and E models, with reinforced wing and landing gear, were in Korea by early 1951, first operating as bomber escorts and later as tactical fighter-bombers. Resurrected from World War II retirement were Boeing's B–29 Superfortress heavy bombers. They went into action during the first week of fighting, and on November 8, 1950 seventy of these, escorted by F–80s, were employed on a mission to knock out bridges over which the Chinese Communists were moving troops and supplies. It was during that mission the first MiG–15 was shot down.

The B–29s would be used throughout the war for long ranging strikes. For specific night actions, particularly inter-

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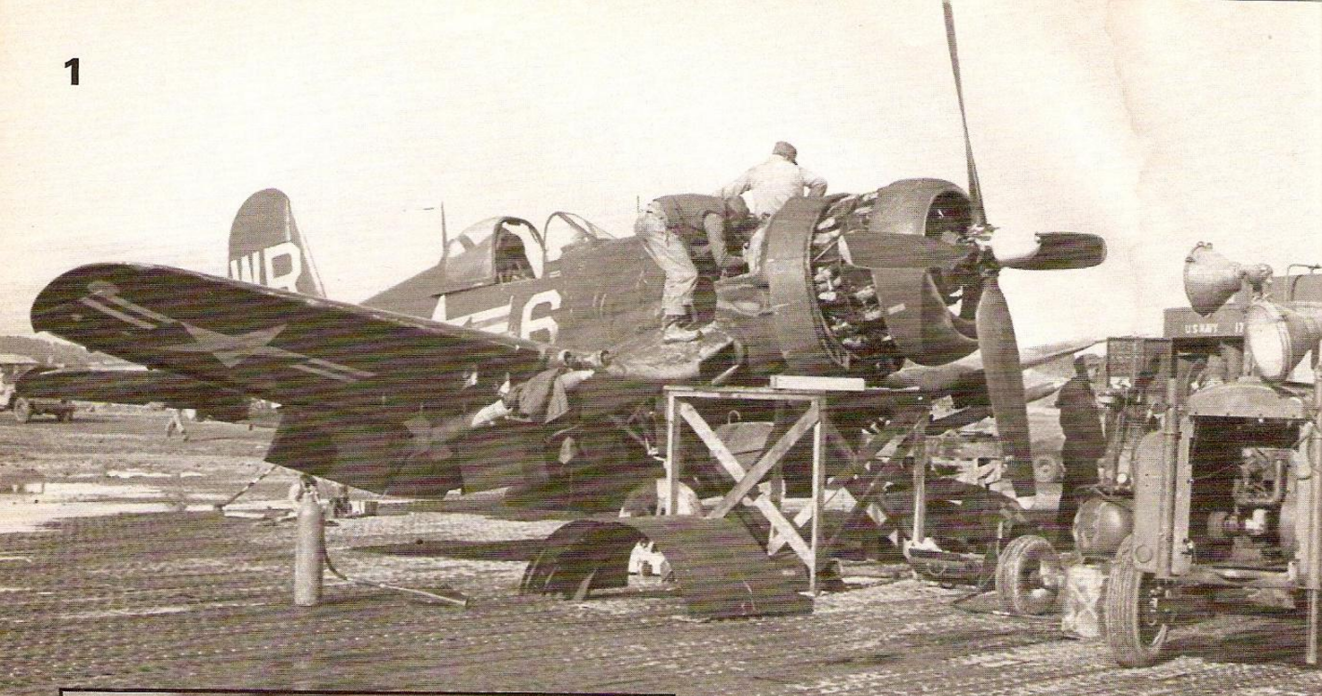

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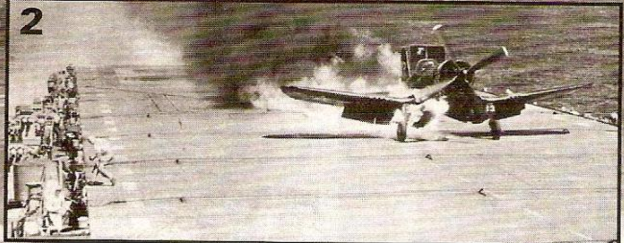

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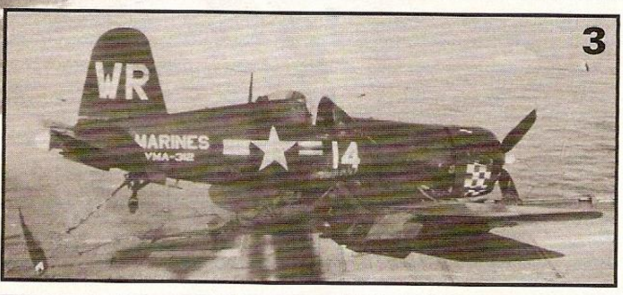

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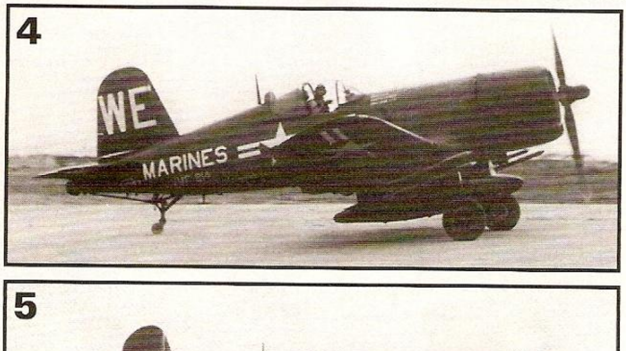

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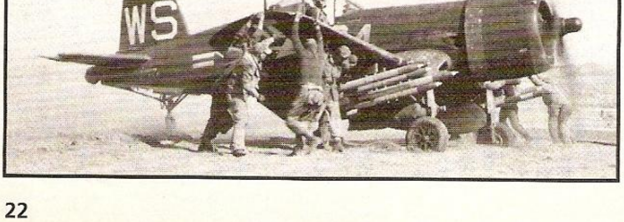

1. Vought's World War II F4U Corsair was another workhorse recalled to fight yet another battle. Here, a few days after General MacArthur's surprise end run at Inchon, which cut the North Koreans off from their base of supply, F4Us from veteran VMF-312 "Checkerboards" undergo maintenance in less than first class surroundings. VMF-312 was in action within five days of the Inchon landings, September, 1950. (James Bailey)

2. The crews of Navy close support planes literally lived offshore aboard their carriers or, when battle lines stabilized, moved on to ground bases. During the Marine pullback from the Chosin Reservoir in December, 1950, carrier planes kept tens of thousands of Chinese troops at bay during the fighting retreat. Here, an F4U–4 returns to *USS Bataan*, its belly tank igniting on landing.

3. Another F4U crash-lands aboard *Bataan* after combat in mid-1952. It then went over the side, but pilot was rescued. *Bataan* was one of eight *Independence* class light carriers on cruiser hulls that survived World War II. It and *Cabot* were refitted for Anti-Submarine Warfare.

4. The first Marine Corps Corsair sets down on Kimpo airfield, after its capture by the 5th Marines, as part of the successful Inchon landing. Flown by Lt. John Hanes, this F4U carries 5-inch rockets under its wing and made an emergency landing, after being hit by enemy ground fire.

5. Working in the dust of a quick turnaround, a Marine F4U–4B from VMF-323 is loaded with rockets.

6. The last sortie flown by VMA-332 is symbolized by this F4U–4B coming back aboard *USS Bairoko* on July 27, 1953.

7. An F4U–5N nightfighter operating from *USS Kearsarge*, an *Essex* class carrier, in 1952. Carrier also had F9F–2 Panther jets aboard.

8. A Douglas AD–3 Skyraider of VA-35 warms up on *USS Leyte*, another *Essex* class that was to have undergone modernization, but was kept in service because of the Korean War.

9. *USS Boxer* (CV-21) flexes its muscles with this segment of a large strike force composed of AD Skyraiders and F4U Corsairs. Above them, flying top cover for this mission to the north, are F9F Panther jets. U.S. Navy and Marines flew 40 percent of all interdiction missions.

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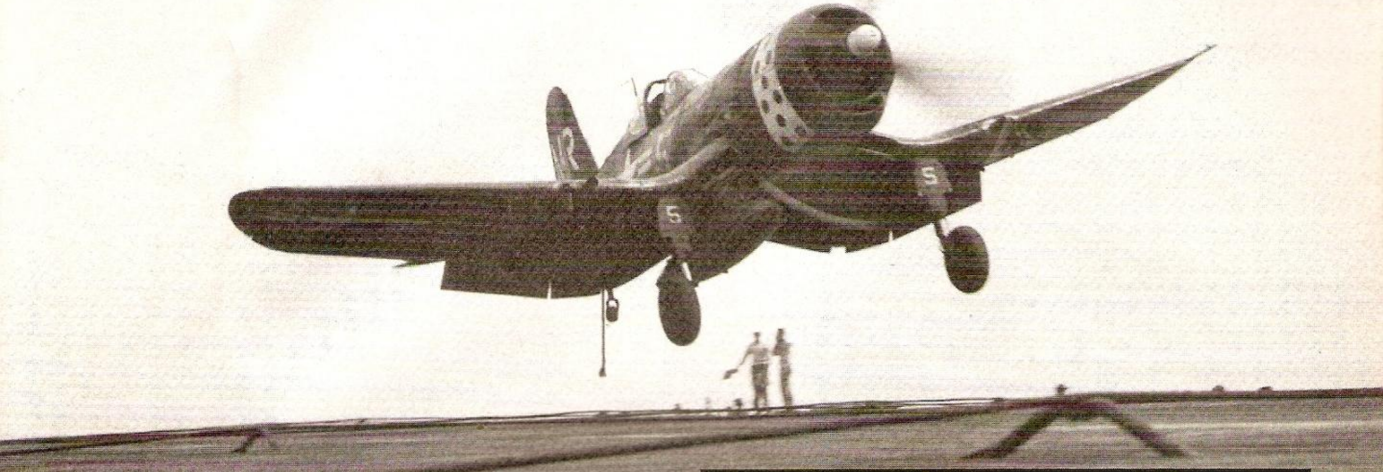

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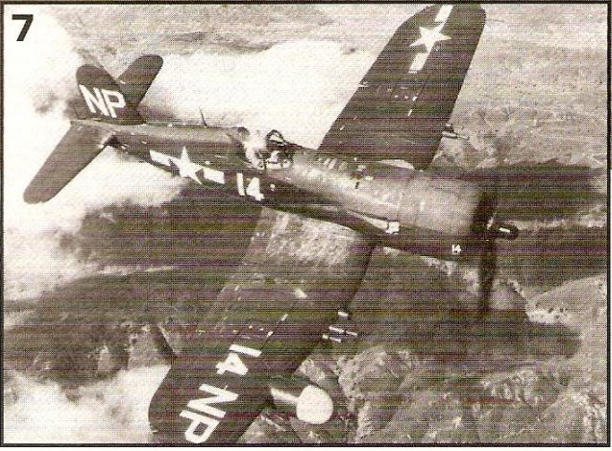

F4U-5P CORSAIR

T/Sgt. George W. Glauser USMC
Marine pilot: Photo Detachment/MAG-33

Early photo reconnaissance missions over the Pusan Perimeter and photographing Inchon Harbor in preparation for the famous Inchon landing, Summer 1950.

"Our immediate mission was to provide coverage of the invasion by the North Koreans toward the harbor city of Pusan. We provided aerial photo intelligence of the enemy's movements along the forty-mile Pusan Perimeter. These photos were sent daily to General MacArthur's HQ in Tokyo. All of our initial air support missions were flown out of Itazuke AB in Japan.

"My first photo reconnaissance mission was flown on 10 August 1950 over the Pusan area. These missions started before sunrise and usually did not end until after sunset. It was common to fly up to eight hours on those missions. I would depart Itami AB and land at Itazuke where I would receive briefings from the Air Force. Then I would fly over the Sea of Japan to Pusan where I would expose my film magazine, fly back to Itazuke, debrief and then head back to Itami. The days were very long.

"The Corsair had a viewfinder in the floor aft of the control stick, designed to view and align my vertical aerial shots. I never used that system because of the propensity of engine oil runoff that entirely obscured my vision. I quickly adapted and used the nose of my aircraft as my main alignment point for each photo run. These missions only lasted a couple of weeks because the North Koreans were stopped short of Pusan.

"Perhaps our most important missions began on 26 August when we took two of our photo Corsairs up to begin photographing the Inchon area, in particular, the thirty-two foot tides in the harbor. It was critical to provide detailed photos at various times of high, low and ebb tides of the entire harbor, the surrounding shoreline and city. Eight missions were ordered to be flown in the next four days. During 27-30 August, I flew four solo missions out of Itazuke. My time on target lasted only twenty minutes, which was adequate time to shoot an entire magazine of film with the oblique shots before returning to base. My escorts during these runs were F–82 Twin Mustangs and F–80s flying high cover. The pictures were absolutely critical in planning the Inchon Landing and, needless to say, our attack broke the back of the North Korean Army and helped U.S. ground forces advance out of the Pusan Perimeter."

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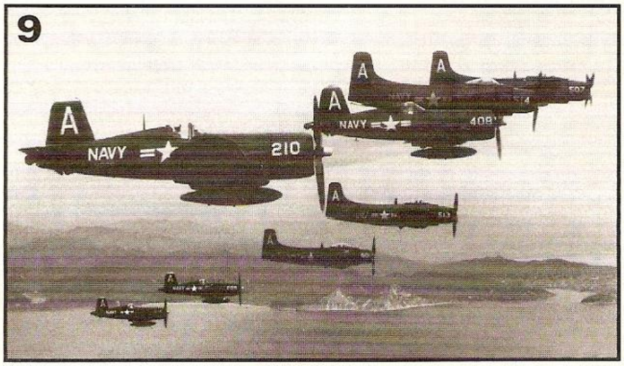

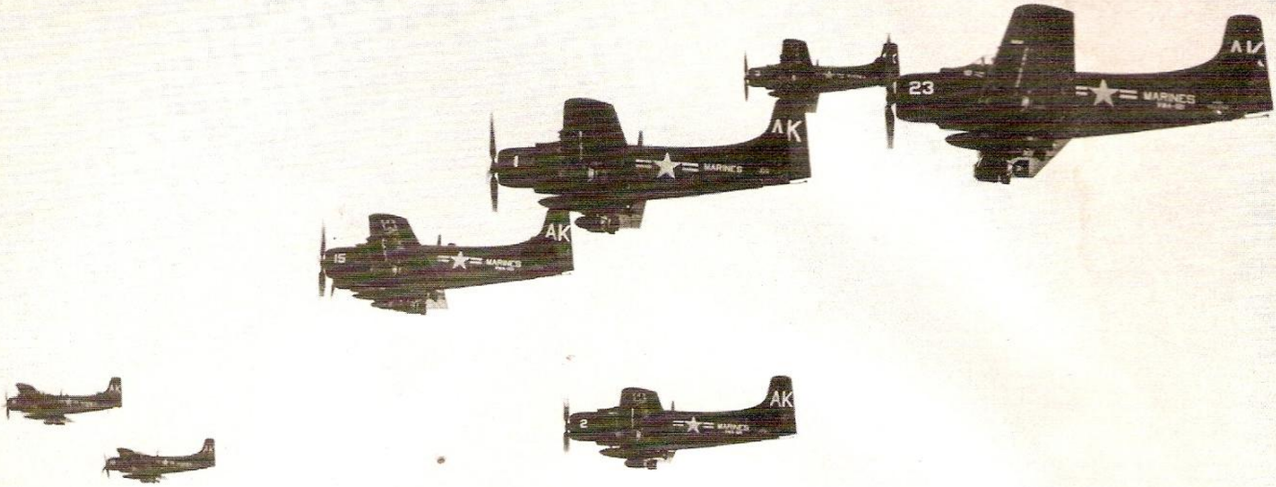

Skyraiders from VMA-121, the "Heavy Haulers," during an all-out mission. Activated in the summer of 1951, they would drop the most tonnage of bombs on the enemy for Marine aircraft and were assigned to Marine Air Gp. 33, arriving at K-3, Korea in October, the first Marine squadron to take the Skyraider into combat. Close support was their primary mission and they were instrumental in destroying bridges, railroads, supply dumps and enemy airfields. In all, three Marine AD squadrons saw service in Korea.

cepts, after relying on the Air Force's B–26 and F–82 Twin Mustang, plus the Navy's F4U Corsair and F7F twin-engined Tigercat fighter of World War II vintage, the USAF introduced a hurry up modification of the F–80 and its two-seat trainer counterpart, the T–33. Known as the Lockheed F–94 Starfire, the radar-equipped, all-weather night-fighter went to Korea in the winter of 1951-1952, but did not see significant action until 1953, mainly because officials were concerned its sophisticated radar might be compromised if one should be shot down and fall into enemy hands. The F–94's Navy counterpart, the Douglas F3D Skyknight, had fewer restrictions hampering its deployment. It was fully operational by November, 1952, and the USAF never lost a B–29 during a night mission in which F3Ds

(Text continued on page 34)

RF–80A vs. MiG–15

1st Lt. Francis W. Meyer
October 10, 1951
15th Tactical Recon Squadron

Mission: To photograph main railroad line from Pyongyang northward to Sinanju and assess bomb damage from daylight bombing raid by F–84s from the 49th Group.

"This was to be my 20th combat mission and my first encounter with a MiG–15. Most missions until this time were single aircraft since the MiGs had not been a serious threat. Each day there were more and more of us getting jumped by these fast jets, so it was decided that all RF–80 missions north of Pyongyang be with two aircraft. One would photograph the target while the other watched for enemy aircraft.

"Having completed my photo run with Lt. Dick McNulty observing, we changed positions, with him photographing and me taking the watch. Approaching Sinanju, I was indicating about 50 mph above McNulty's speed. As observer pilot, you would be all over the sky watching for MiGs and this maneuvering would get you too far behind the lead unless you increased your speed.

"I was in a left turn checking our tail and started to reverse my turn to the right when I noticed a white contrail. We were at 21,000 feet and much too low for cons. About this time, Dick yells out on the radio...Break Right, Frank! My adrenaline cut in and, in a panic, I broke left rather than the way he had told me. Just before I did, an orange fireball about the size of a grapefruit went within a few feet of my canopy, followed by a MiG–15 overshooting me in a climb to come around in another pass. The pilot was looking down at me, and was wearing a leather helmet and goggles.

"In my dive, I jettisoned the tip tanks so I could be more maneuverable. I called Dick to check on his position and he replied he was shaking one off his tail, and that the MiG which had been after me had flown into one of my descending tip tanks. This was never confirmed, though. Of all the missions that I flew, this was the closest I ever came to a MiG."

1. Shark-mouthed F–51 Mustangs from the 12th Fighter Bomber Sqdn., part of the 18th Fighter Bomber Wing, operating out of Chinhae AB (K-10), twenty miles east of Pusan, South Korea, in February, 1951. (Mario Prevosti)

2. Lockheed's F–80, America's first jet, had one glaring weakness, lack of range, which allowed it little loiter time over the battlefront, particularly during the early days of the war, when F–80 was based in Japan. (Robert Fogg)

3. Upon outbreak of fighting, 51st Fighter Wing on Okinawa had three F–80 squadrons and one F–82 Twin Mustang squadron. Two full F–80 units and a large number of F–82s were dispatched to the front. This red nosed F–80 belongs to one of the former, the 25th Fighter Sqdn., based at Suwon, twenty miles south of the South Korean capital of Seoul. (Clure Smith)

4. Suwon (K-13) was one of the busiest airstrips in Korea and home to both the 8th Fighter-Bomber Wing and the 51st Fighter Wing. Yellow striped sunburst on tail of this F–80 denotes the 80th Sqdn. It carries a pair of 1,000 lb. bombs. (C. Washburn)

5. In an effort to counter Chinese efforts to supply their troops, the F–84 Thunderjet was brought in to bolster fighter-bomber mission. SAC's 27th Fighter Escort Wing, out of Bergstrom AFB, Texas, provided the first Thunderjets sent to Korea. This one is from its 522nd Sqdn., based at Taegu in south central Korea, scene of several bitter battles. (Gerald Major)

6. General MacArthur used SCAP – for *Supreme Commander Allied Powers* – a C–69 Lockheed Constellation, as his personal aircraft. He later flew in a larger C–121. Photo was taken in October, 1950, at Pusan East (K-9) just prior to the entry of the Chinese into the war. (Charles Schreffler)

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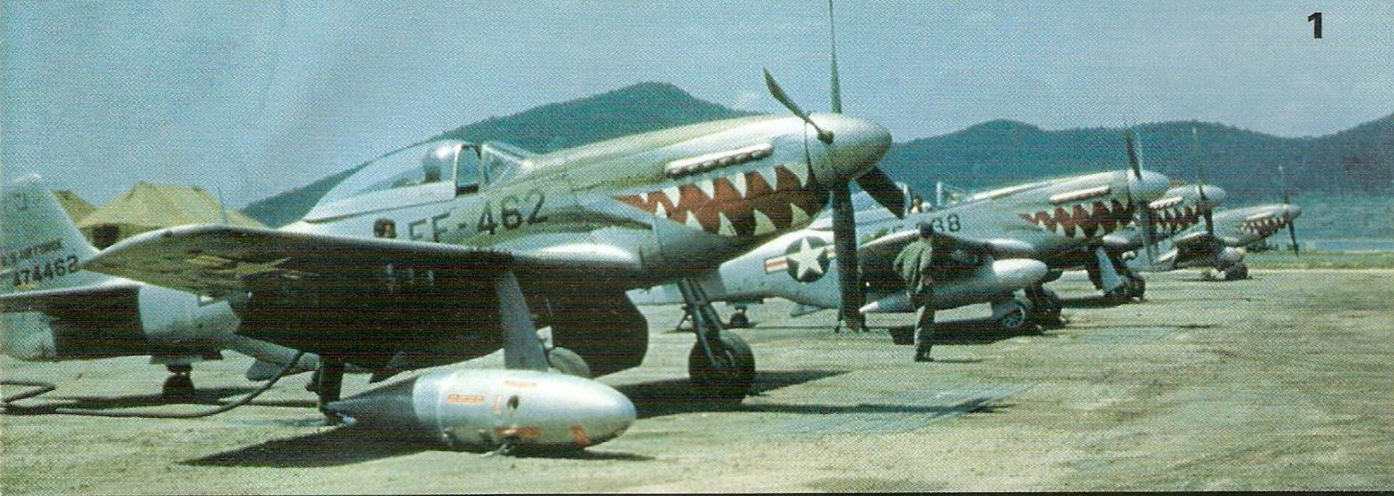
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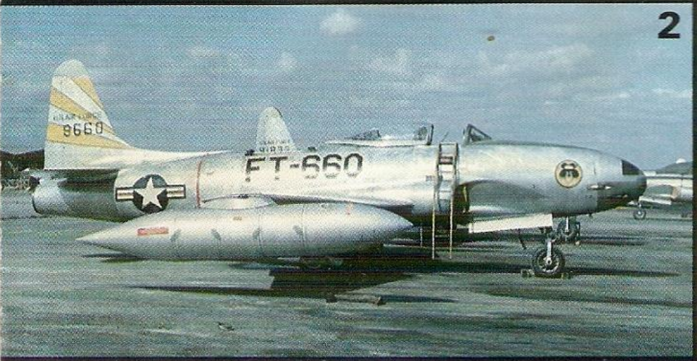
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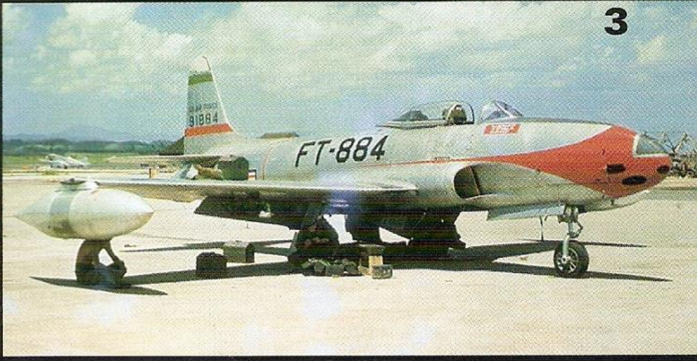
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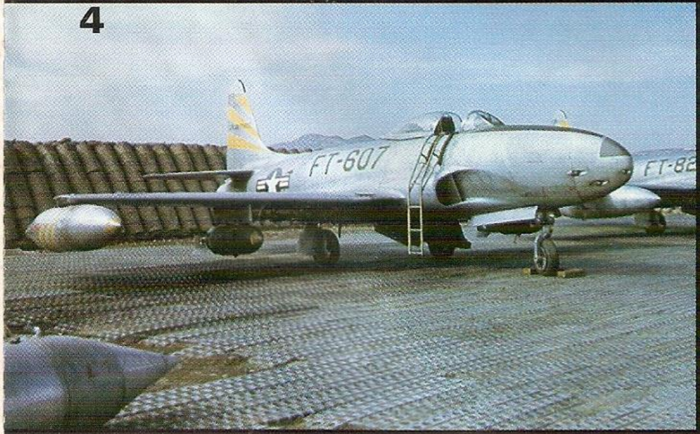
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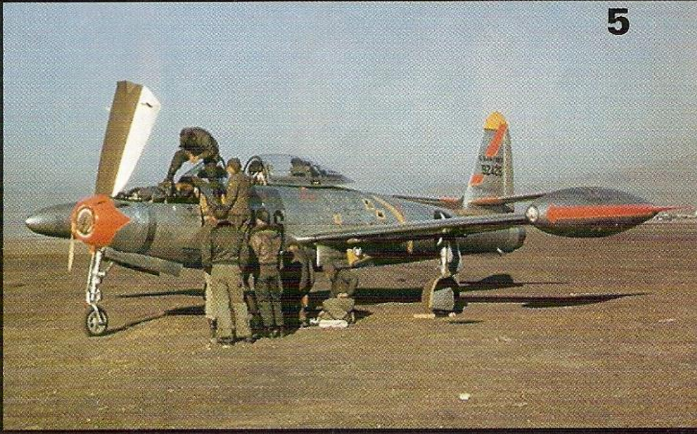

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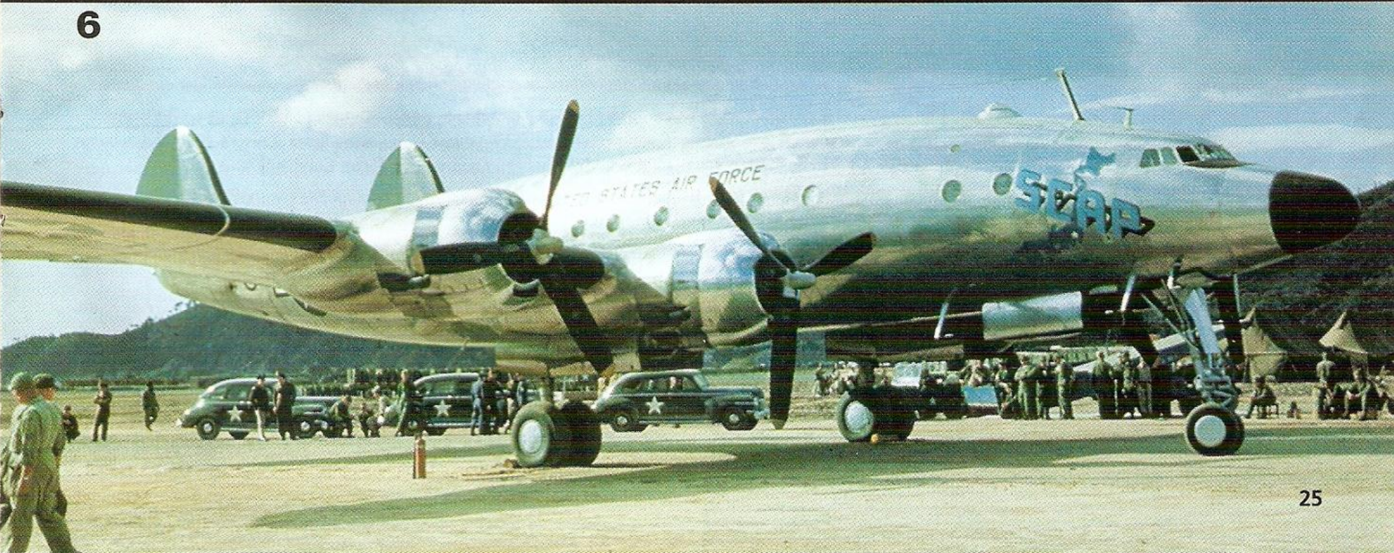
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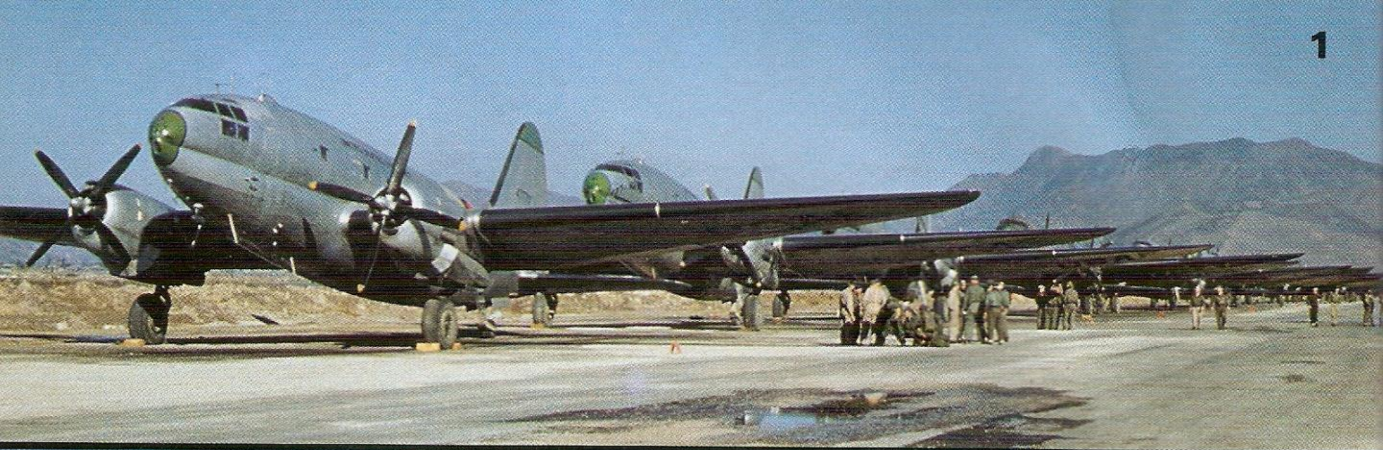
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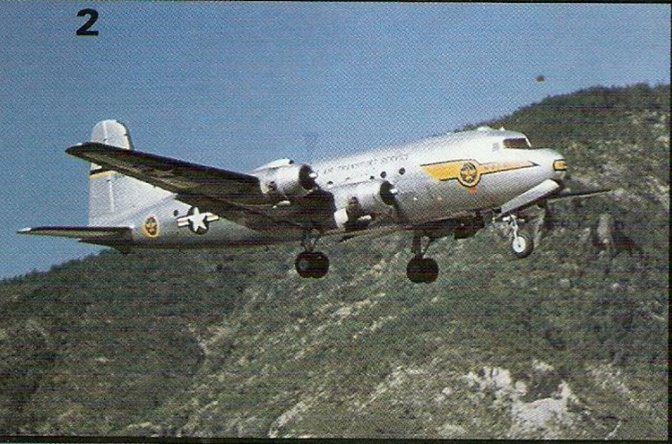
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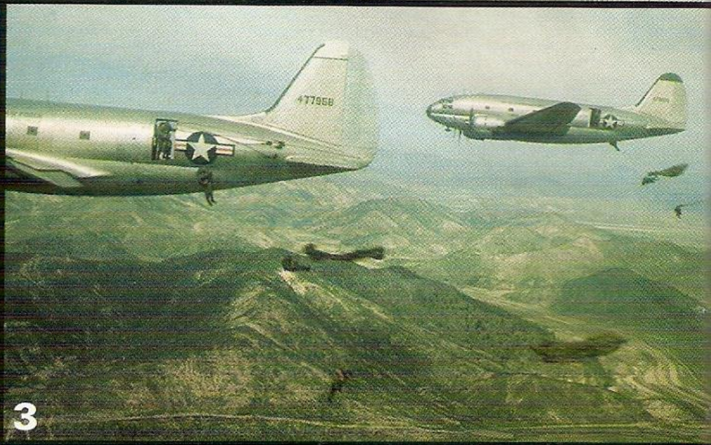
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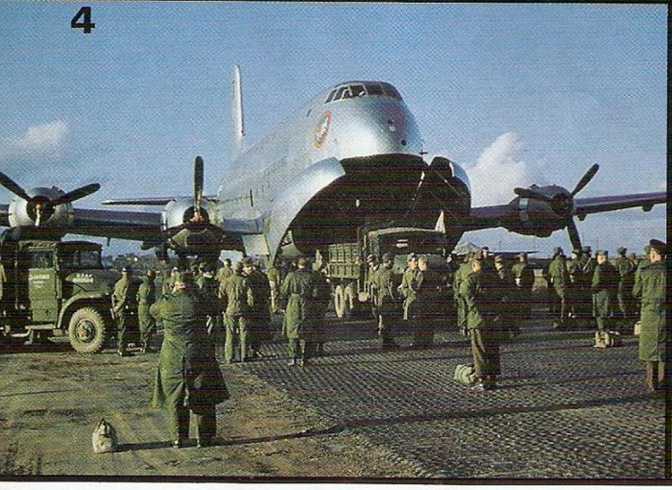
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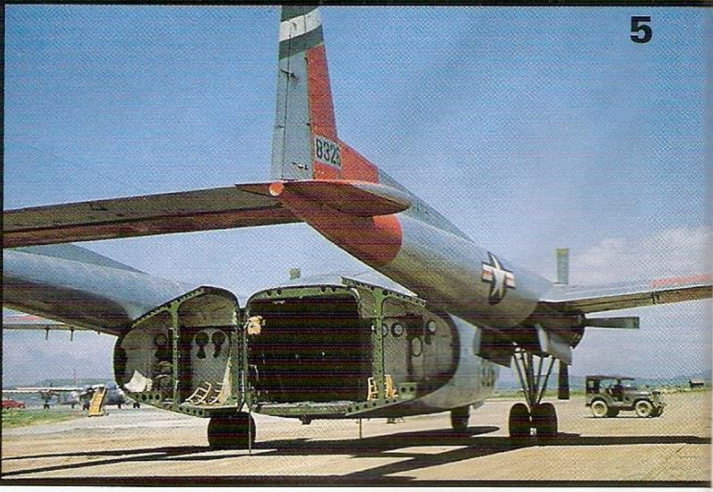
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1. One of the greatest advantages U.N. forces had in Korea was rapid airlift of supplies. In order to achieve this a mixture of WW II, as well as postwar cargo carriers was employed. These Curtiss C–46 Commandos were among the most versatile, capable of operating from Korea's notoriously poor airstrips. They line up at Pohang, just north of the Pusan Perimeter, for a 1951 paratroop drop behind enemy lines. (John Corrigan)

2. Another workhorse of Combat Cargo Command was the C–54, which operated throughout the conflict, transporting supplies and evacuating wounded. This one is shown over Pusan East (K-9) in the summer of 1952. (Ken Lamoreux)

3. Spilling from venerable C–46s, based at Brady airfield in Japan, troopers from the 187th Regimental Combat Team drop on North Korean and Chinese positions during a 1951 operation. (Ward Odenwald)

4. A late arrival to the fighting was the massive Douglas C–124 Globemaster, which gradually replaced the C–54s operating with 6th Troop Carrier Sqdn. Limited to the number of bases which could handle it, it greatly cut down on the flights required to transport material from Japan to Korea. (Al Gamblin)

5. If C–124 had a huge front maw to load and disgorge equipment, Fairchild's C–119 had a wide-open rear area to do the same. It pioneered low level dropping of troops and pallet cargo loads taken for granted with today's C–130s, and during their epic fighting retreat from Chosin Reservoir in the winter of 1950-1951, kept Marines supplied with everything from ammunition and blankets, to medicine and food. (Al Gamblin)

6. The 49th Fighter-Bomber Gp. turned in their F–80s for newer, more powerful F–84Es in 1951. This one belongs to the 7th Sqdn. based at Taegu. (M.F. Reed)

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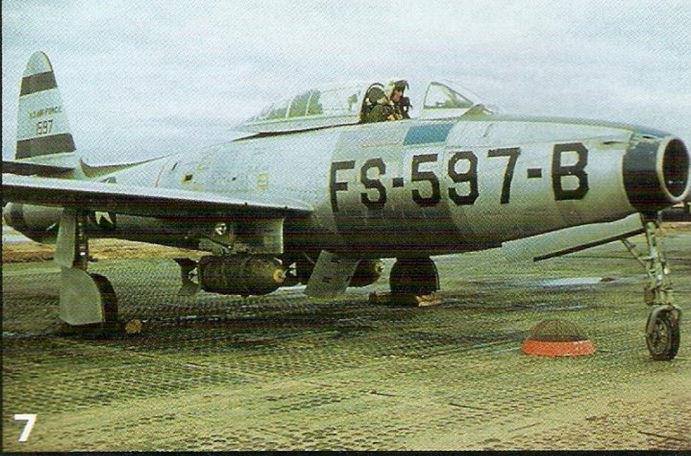

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7. F-84s could carry a bigger bomb load further and faster than the older F-80, which was a fighter pressed into light bomber service, rather than a built-for-the-purpose machine. This 429th Sqdn. F-84E, piloted by Lt. D. Henry and loaded with a pair of 1,000 lb. bombs, is preparing for 1952 mission out of Kunsan (K-8), a major base for F-84s. (Lowell Masley)

8. Of five B-29 Bomb Groups operating over Korea, only one was involved for all 37 months of fighting, the 19th out of Okinawa. Once MiG-15 interceptors became active south of the Yalu River, all B-29 missions were switched to night-time. Note hastily applied black paint on undersides of what would have been an all-metal scheme on this B-29 undergoing a propeller change at Naha. (Louis Branch)

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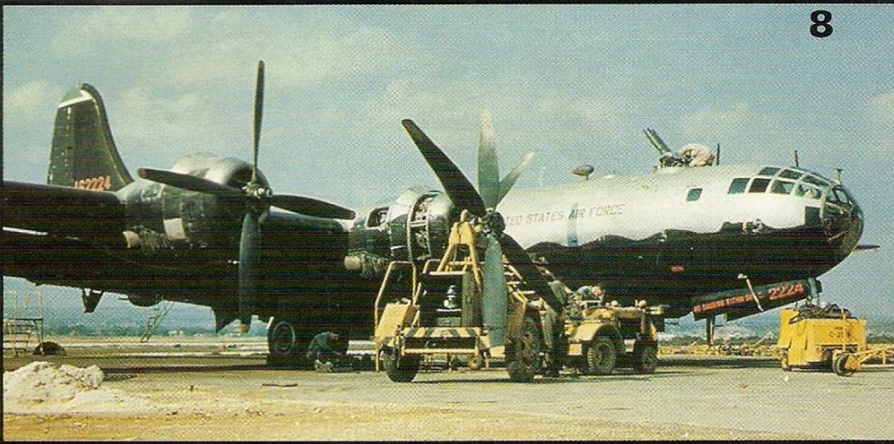

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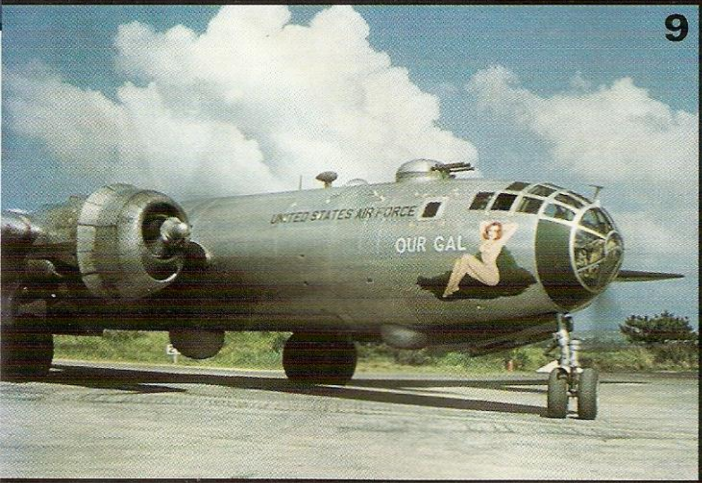

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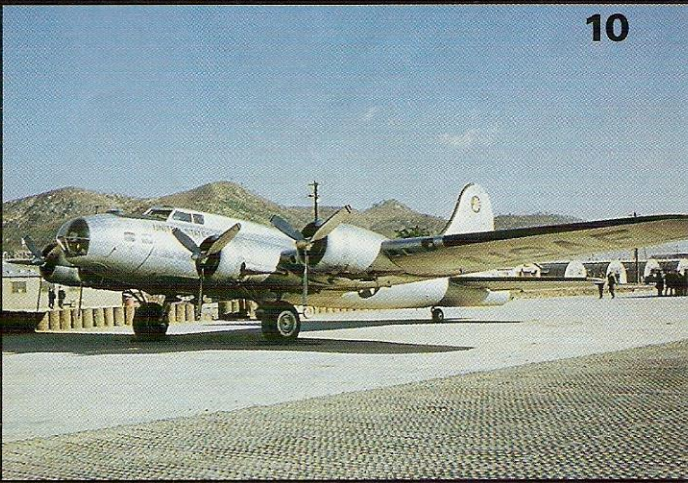

9. Reminiscent of all silver B-29s of World War II, *Our Gal*, a 28th Bomb Sqdn. Superfortress gets ready for a mission during the early days of the war, when probability of interception was remote. B-29s would usually depart their Okinawa base in late afternoon to arrive over North Korea at night. (Charles Beard)

10. No, this isn't an 8th AF mission out of England, but the personal mount of 5th Air Force Commander, General Glenn Barcus, a specially outfitted Boeing B-17, which took him on his appointed rounds between Tokyo and Suwon, South Korea. (Robert Tiel)

11. Since most of the fighter and fighter/bomber squadrons operating in Korea used jets, it was essential that each had its own two-seat T-33. The Lockheed trainer version of the F-80 was used for transition and familiarization flights. This one's fin is marked with the polka dots of the 45th Tactical Recon Sqdn. and was based at Kimpo. (Drury Callahan)

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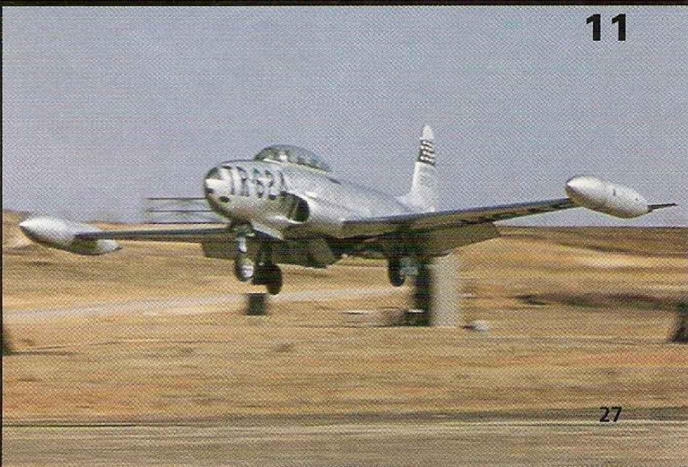

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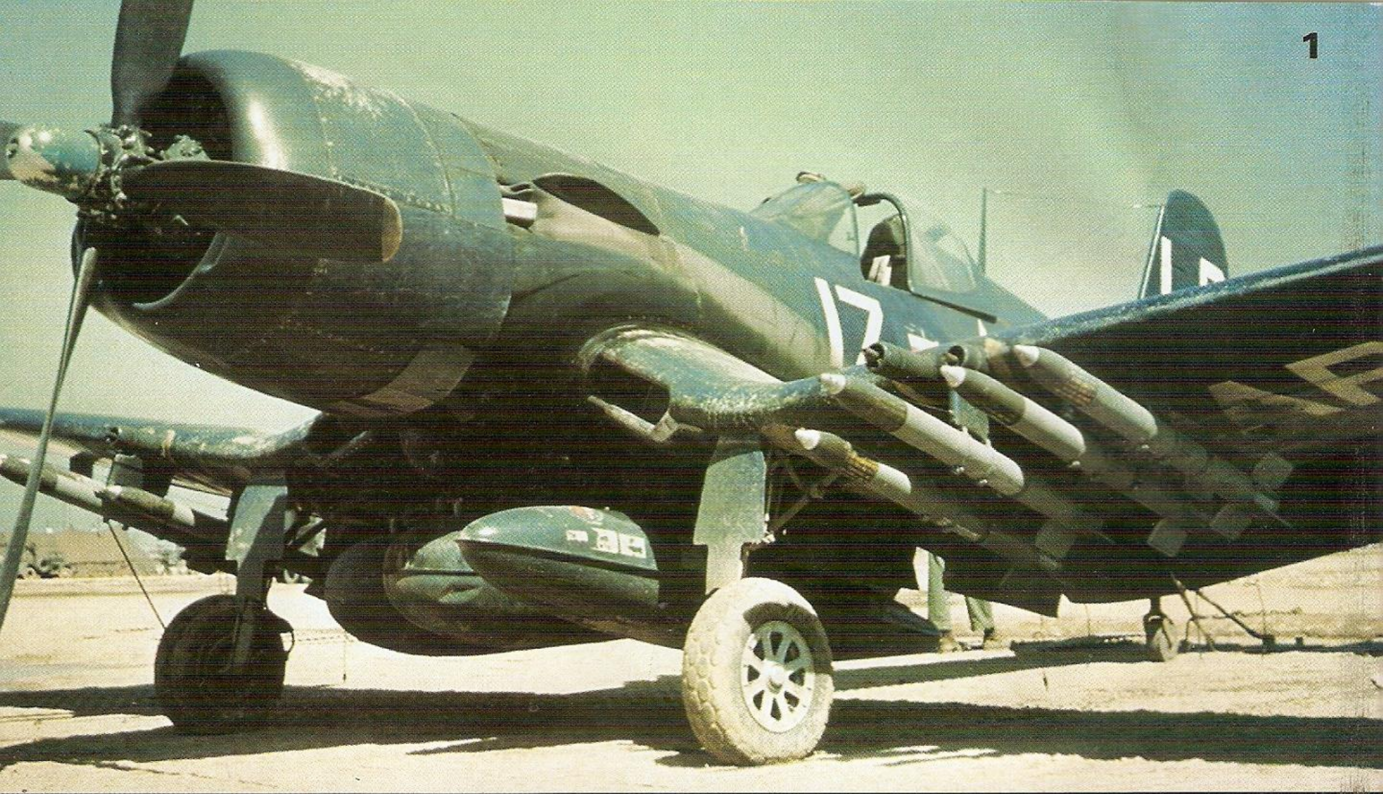

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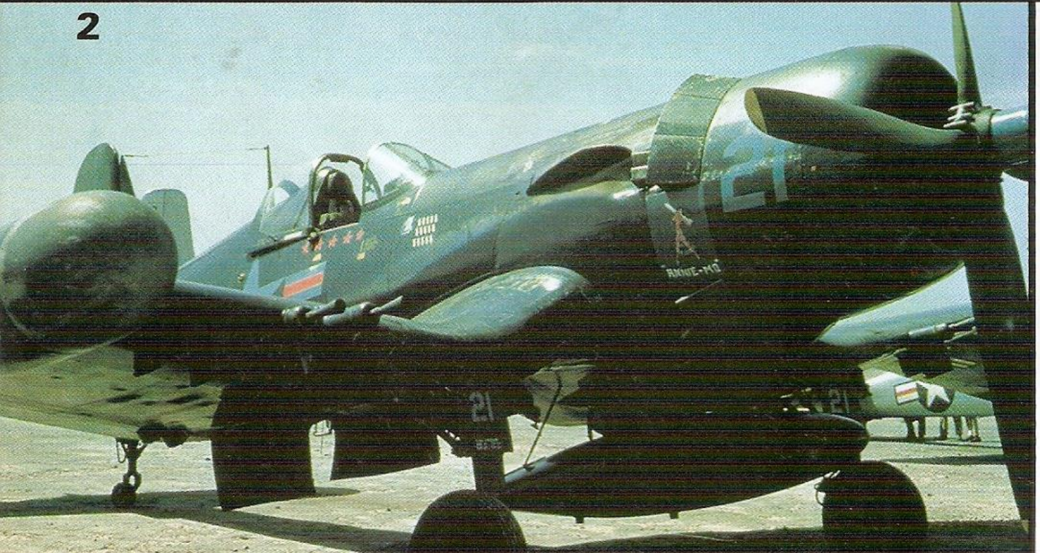

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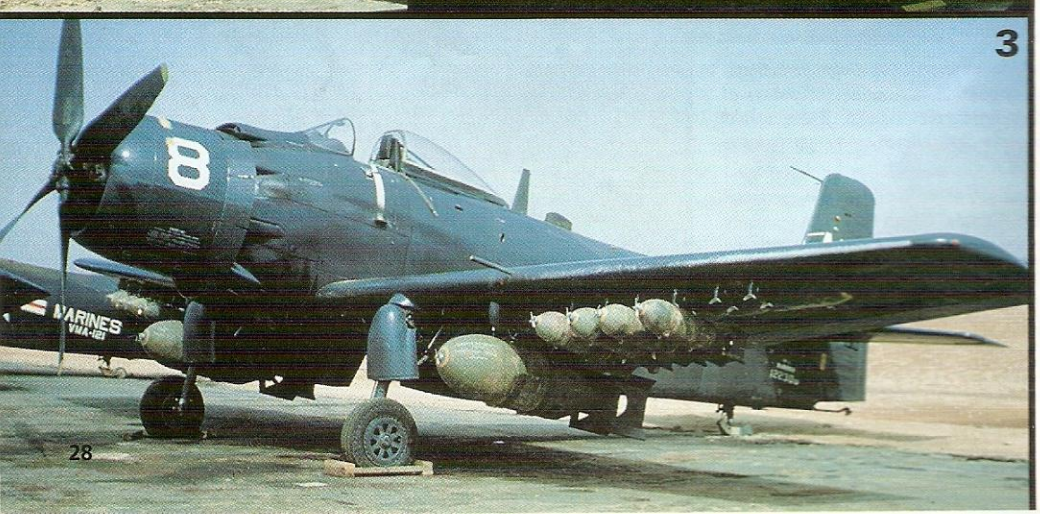

1. Loaded for bear and long loiter time – with a center fuel tank – a well used Marine F4U–5 Corsair from VMF-212 is shown at K-3 strip north of Pohang. It carries eight 5-inch rockets under its wings and a pair of banged up napalm tanks next to its auxiliary fuel cell. It is also armed with four 20mm wing cannon. (Dan Tooker)

2. Lt. Guy Bordelon was the Navy's only ace in Korea. Assigned to VC-3, he got his five kills against night flying, propeller driven aircraft which the Communists used to disrupt the inhabitants of Seoul by dropping bombs at random intervals. When more modern air defense interceptors had little luck against the intruders, Bordelon, in his F4U–5N Corsair, knocked down all his victims during a sixteen-day period in June/July, 1953, just prior to the truce. They consisted of four Yak–18s and a Lavochkin 2. (Jim Ferebee)

3. Major Dick Jarrett's AD Skyraider from VMA-121 is loaded with three tons of bunker-busting bombs for a 1952 mission. One thousand pounders inboard, five hundred pounders outboard. (Clark Jarrett)

F4U Corsairs from *USS Valley Forge* are airborne on a strike against Communist barge traffic attempting to slip down the Korean coast, usually under the cover of darkness. Navy strike planes would work harbors and coves, uncovering camouflaged craft, forcing the enemy to use trucks, which could be hidden off the roads. Once the front stabilized in the summer of 1951, Communist shipments by boats virtually ceased. (Bob Balser)

Seven victory ace, Henry Buttleman, took this shot of the 25th Fighter Sqdn. flight line at (K-13), Suwon in 1953, a few months before armed truce was signed. The 25th, after leaving their F–80Cs in Okinawa and converting to F–86Es early in 1951, quickly became a vital part of the 51st Fighter Wing, commanded by World War II ace, Colonel Francis Gabreski. Buttleman, who scored seven victories, was the USAF's youngest ace of the Korean War. Gabreski, who shot down 28 German planes in the ETO, was one of the oldest, adding 6.5 MiG–15s to his score, for a total of 34.5.

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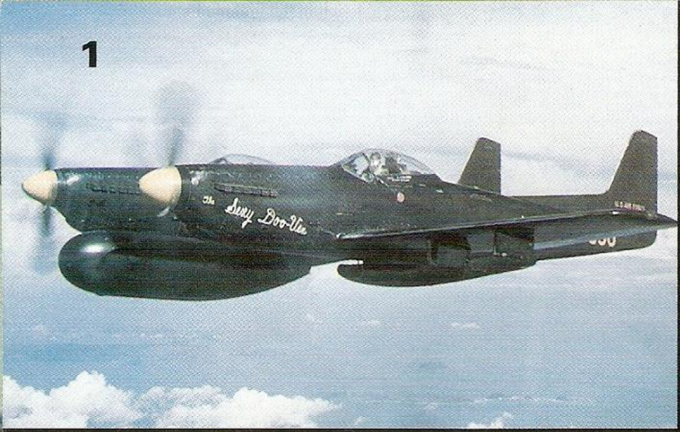

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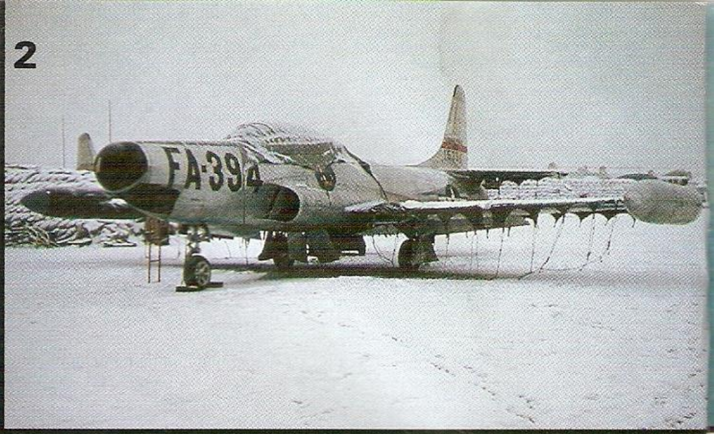

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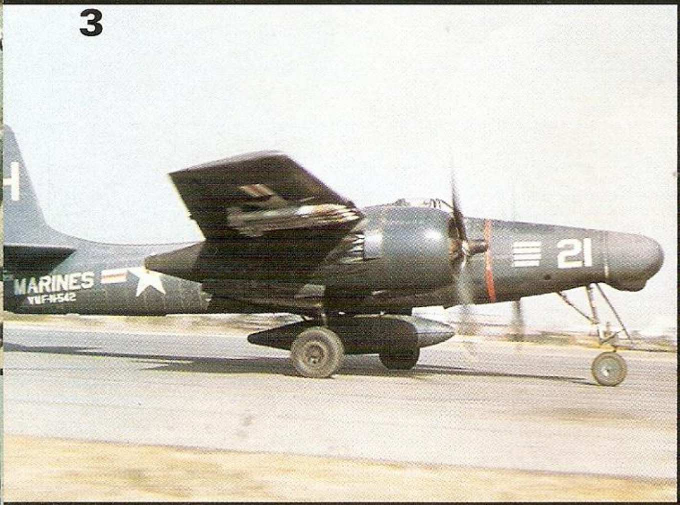

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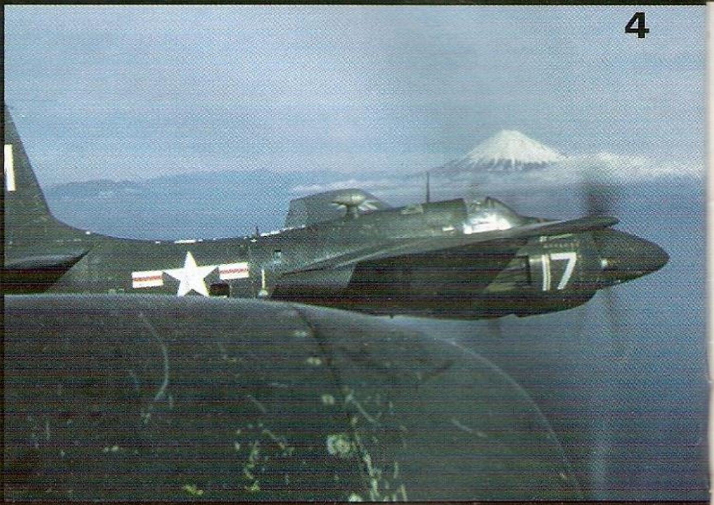

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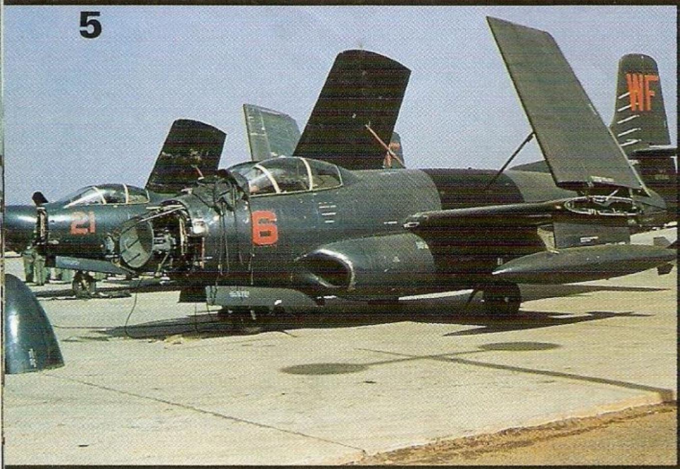

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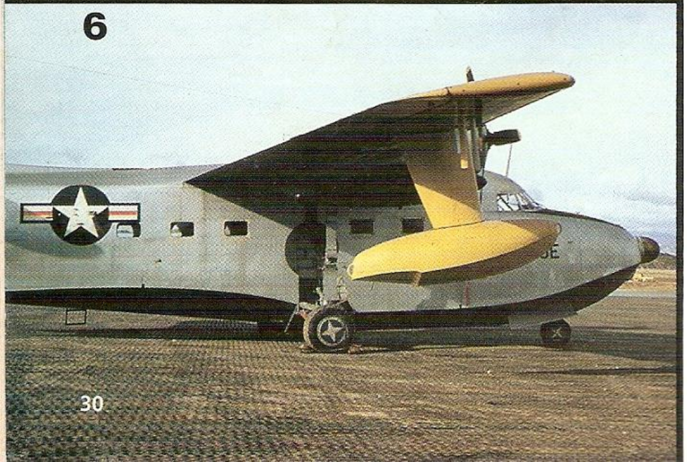

1. Charged with the responsibility for Okinawa's air defense in the spring of 1950, Lt. John Redrup's "Sexy Doo-Ver," an F-82 Twin Mustang assigned to the 4th All Weather Sqdn., is shown prior to the start of hostilities. A few days after this photo was taken, it was flying top cover in the defense of Seoul.

2. 319th All Weather Sqdn. brought their new Lockheed F-94Bs to Korea to assume nightfighter interception role and escort bombers. Their record was marginal in both cases. During escort missions against MiGs, the enemy was directed by Ground Control Intercept (GCI), which usually knew where the F-94s were. On the defensive side, the Communists posed little or no nighttime threat. (Craig Washburn)

3. Too late for WW II in the Pacific, Marine F7F-3Ns were excellent at night interdiction of Communist supply runs. VMF-542 quickly teamed with USAF B-29s during the early days and, when the shrinking Pusan Perimeter became jammed with planes, flew from Japan. (Jack Downy)

4. Grumman Tigercats also made valuable photo ships. These F7F-3Ps pass Mt. Fuji, Japan, after a run over enemy positions in Korea. They were also responsible for critical aerial photos taken of Inchon's beach defenses and tides, which made successful landings possible. (George Glauser)

5. Douglas F3D Skyknight changed role of VMF(N)-513 completely. Prior to its arrival, the unit's F7Fs and F4U Corsairs had been used for air-to-ground missions. The Skyknight switched the squadron to night interceptions and protection of B-29s bombing the Yalu River line separating North Korea from Chinese Manchuria. Unlike the F-94s, the F3Ds sometimes hid themselves within the bomber formations, making it impossible for enemy radar to identify them, a lack that led to several victories over MiG-15s. (M.V. Statzer)

6. Grumman's SA-16 Albatross was a welcome sight to downed pilots forced to ditch at sea. Always on call when strike forces headed north, the amphibians would position themselves along the route and wait for distress calls. Korea was the testing ground for Air-Sea-Rescue procedures, many of which are standard today. (John Weidman)

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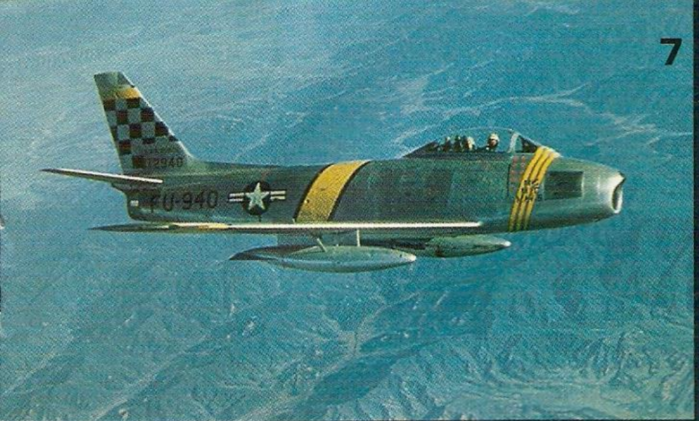

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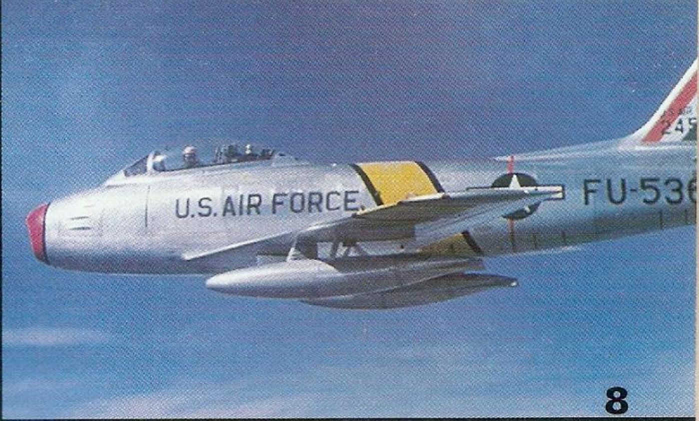

7. The CO of the 39th Fighter Sqdn., Lt. Col. George Ruddell of Riverside, Calif., and an ace with eight victories, heads south from MiG Alley after a combat patrol. "MiG Mad Mavis" belonged to the 51st Fighter Wing, which had begun the war flying close support with F–80s. They re-equipped with F–86Es in the fall of 1951. (Kent Coll.)

8. The logo, "U.S. Air Force," stenciled on its side marks the photo of this F–86E Sabre from the 67th Fighter Bomber Sqdn. as having been taken in the summer of 1953, when USAF was active in patrolling up and down both coastlines, shortly after armed truce went into effect. For full story of F–86 in Korea see *Airpower*, September, 1982, available in back issue. (Charles Gelveles)

9. A B–26 from the 37th Bomb Sqdn. returns from a pre-dawn mission over North Korea. Part of the 17th Bomb Wing, operating out of Pusan East, the old WW II Invader often had to fly the length of the Peninsula to reach its targets. (John Wiedman)

10. Late afternoon preflight for a B–26 about to depart on the first night sortie. It would remain on station until relieved by another B–26, keeping main roads under constant surveillance. (Al Keeler)

11. Top scoring ace of the Korean War, with 16 victories, Captain Joseph McConnell of the 39th Fighter Sqdn. is shown landing at Suwon, after his final mission on May 18, 1953, in which he shot down three enemy aircraft. Blackened nose gun ports indicate intense action. During World War II, McConnell had flown combat as a B–24 bomber navigator. (Ron Wilson)

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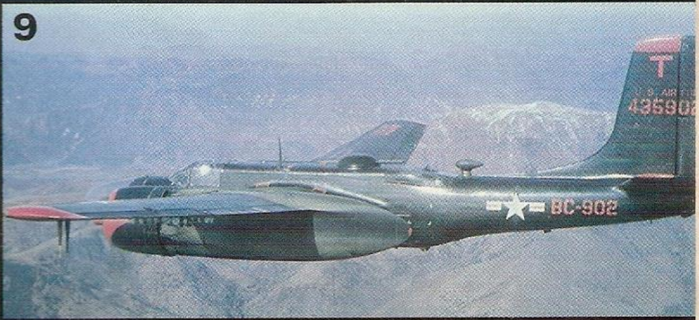

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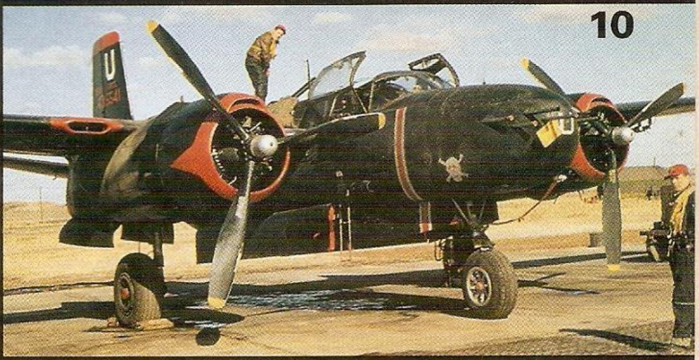

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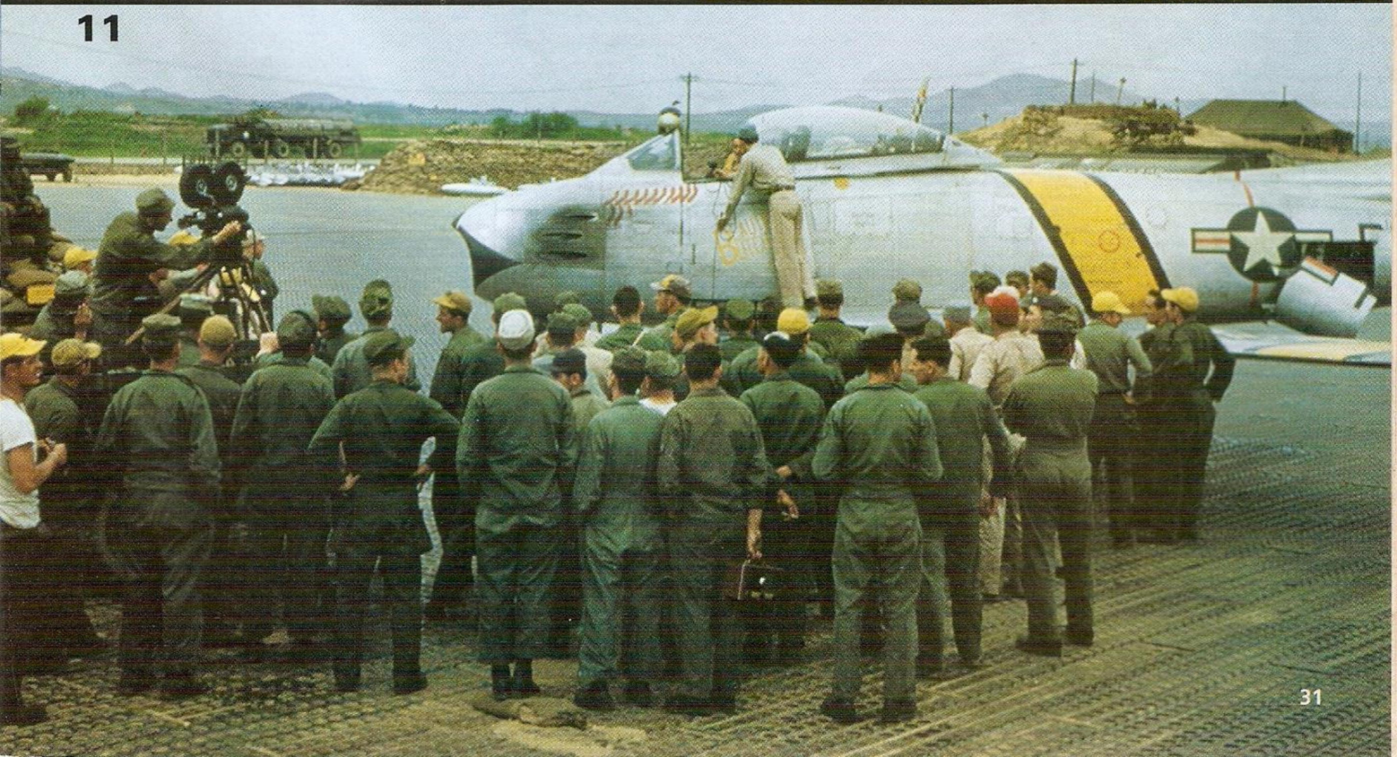
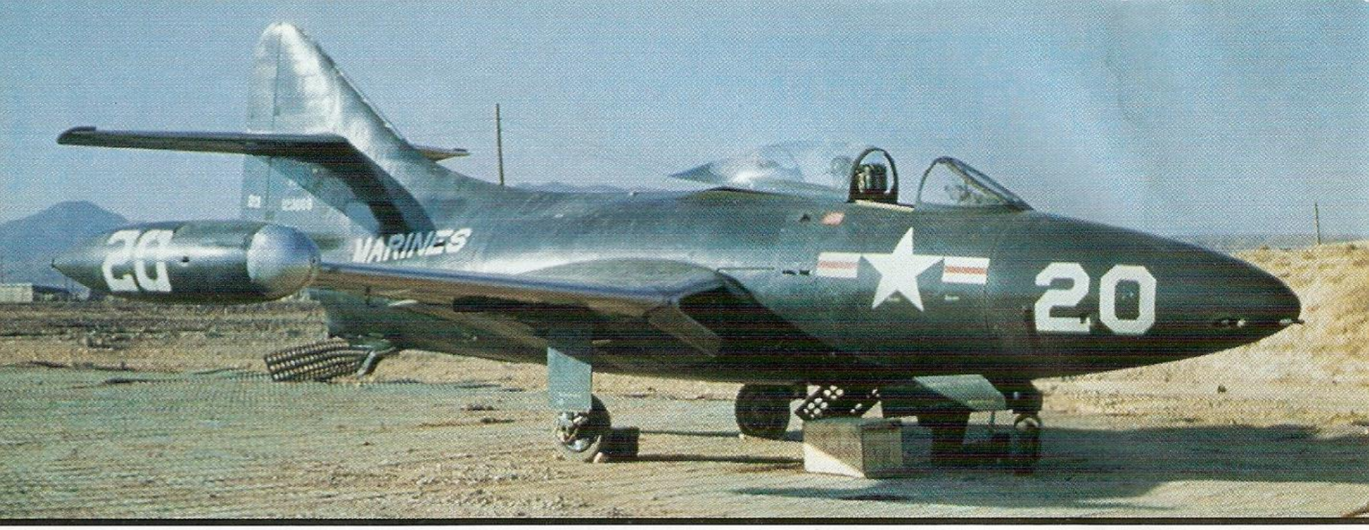
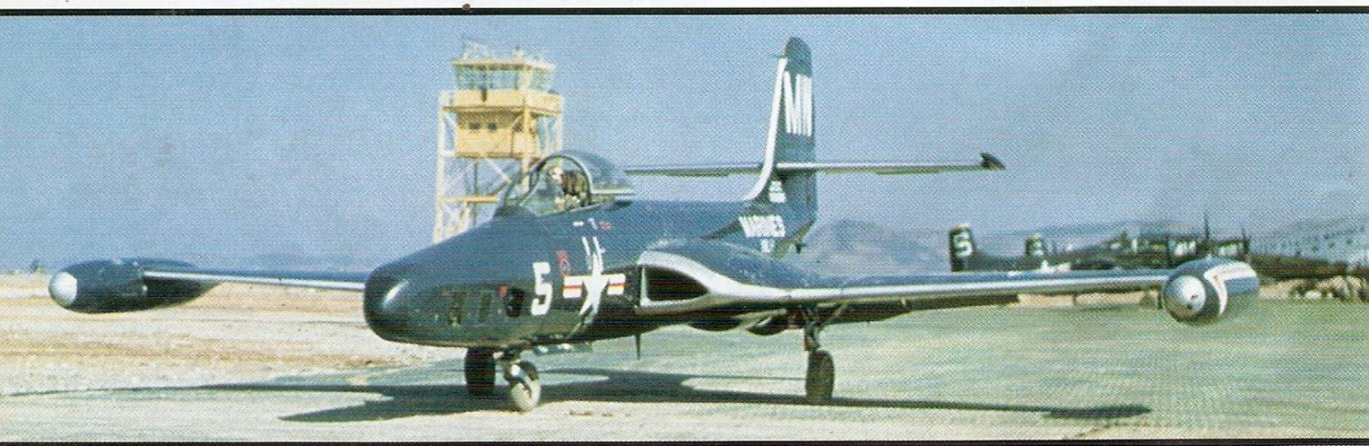


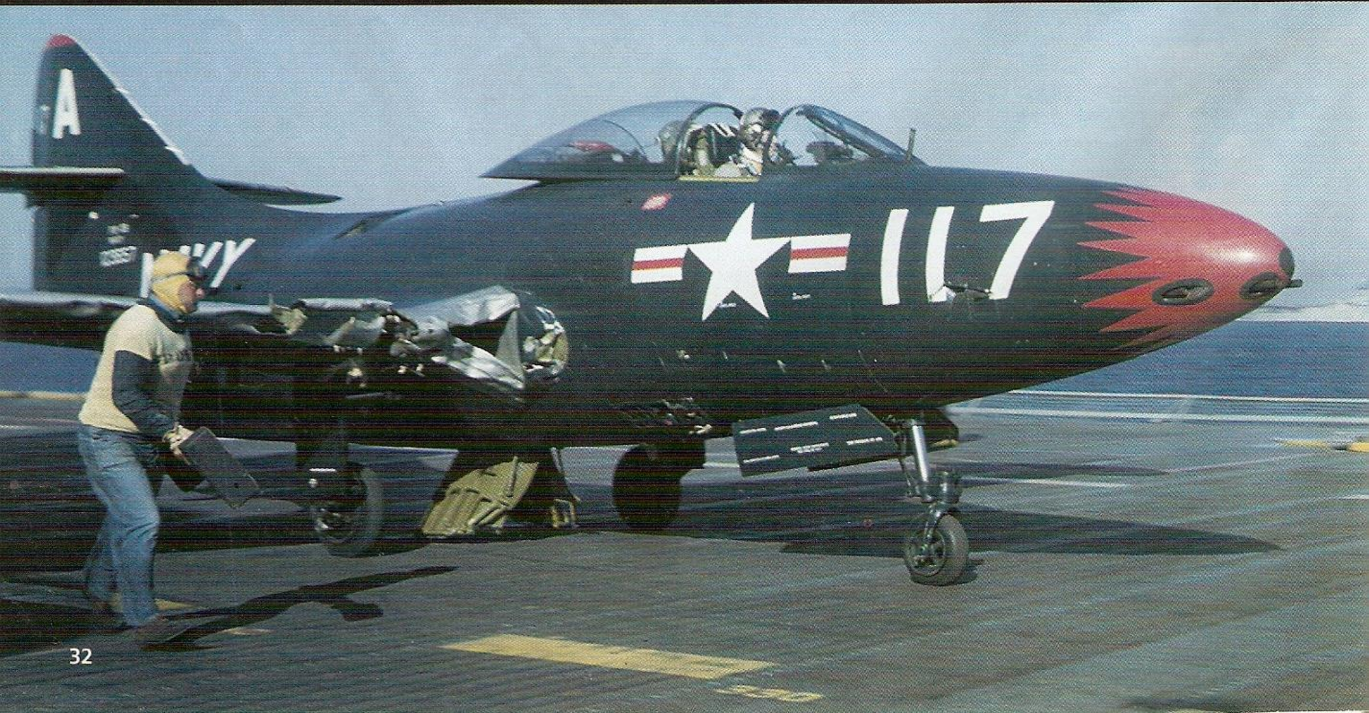


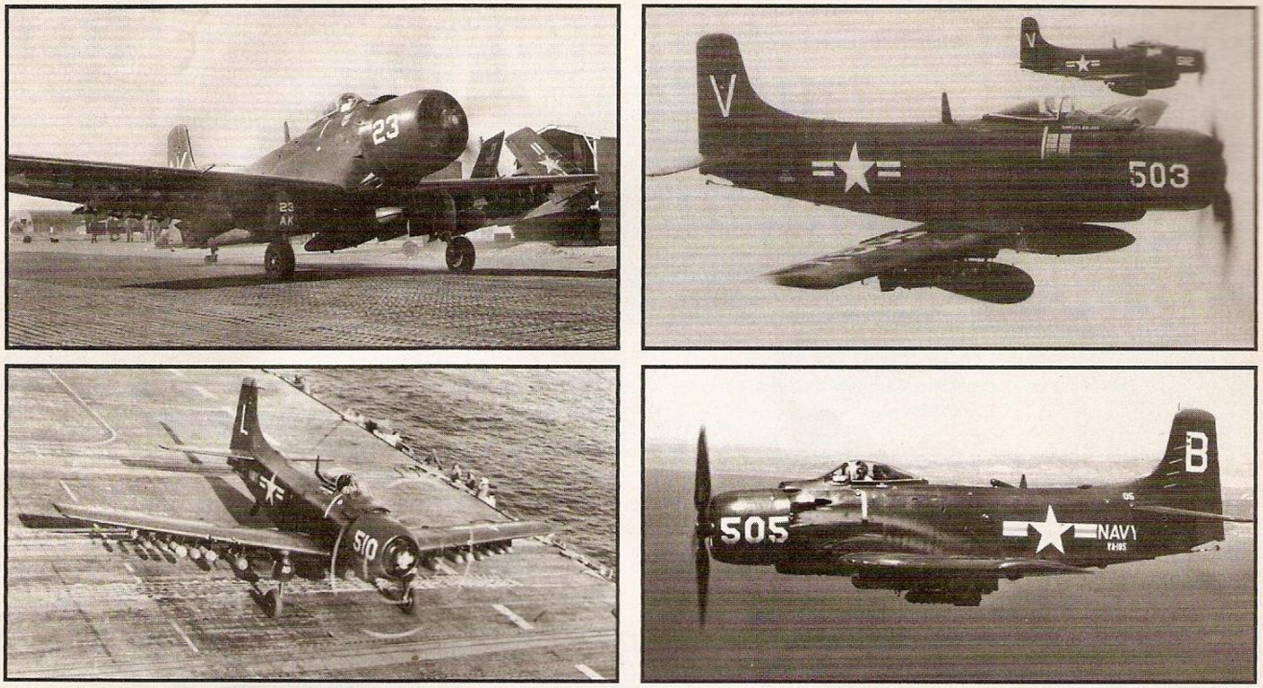
Above: Marines used two F9F Panther squadrons in Korea, combining them with Corsair squadrons for close support duties. This F9F–2 was assigned to VMF-311 at Pohang (K-3) on southern tip of Korea, and squadron flew the Corps' final combat sortie of the war. (Wm. Nowadnick)

Middle: McDonnell F2H–2P took over tactical photo recon from Corsairs and Tigercats. This ship from VMJ-1 was under control of the USAF's 67th Tactical Recon Wing based at Kimpo. (J. Bathrick)

Bottom: Ruggedness best described Grumman's F9F Panther. This one hit a tree during a low level strafing pass and still returned safely to its carrier, flying all the way back from North Korea. (W.L. Erdbrink)







Four views of the AD Skyraider in Korea. From top left to right: An AD–3 Skyraider from VMA-121 loaded with eight 250 lb. bombs and two 500 lb. weapons under its wings, plus a 110 gallon belly tank, takes off for an interdiction mission. Arrival of Skyraider in Korea gave Marines a near 300 percent increase in bomb load capability over older F4U Corsair. AD air strikes were not only launched from ground bases, but also flown from carriers such as the *Philippine Sea*. Here, a pair of AD–4s from VA-115 on their way to targets in February, 1951, with the same eight 250 lb. bombs, plus a pair of napalm tanks in place of the 500 lb. bombs in lead photo. Navy launched its first Skyraider attacks on July 3, 1950, when VA-55 hit North Korean capital while operating from *USS Valley Forge*.

Turkey Day, 1952, and another AD–4 loaded with bombs and rockets prepares to launch from *Bon Homme Richard*, one of eight fleet carriers on station that year. During Korean War carrier air strikes had two outstanding advantages: the carriers involved could constantly reposition themselves to close in on targets or switch to new ones, and because of a lack of modern strike aircraft of their own, Communist forces had few resources to threaten U.S. carriers. Final photo shows the Skyraider in a night bombing mode. This AD–4N was based aboard *USS Princeton* during the fall and winter of 1952-1953 and carried a second crewman within the fuselage to operate radar bombing systems.

F–84D THUNDERJET

Pilot: Lt. Harold Beasley
311th Fighter Bomber Squadron

"By the end of June 1952, we were getting short on F–84Es. Rather than pull F–51s out of mothballs, they decided to get F–84Ds out of storage and put in a bigger engine. We lost our E models to another Thunderjet Wing just as the D models with the new engines began to arrive. It was a pretty good aircraft, but we were restricted on using 100% power for take off because it might collapse the intake ducts.

"It was 11 August 1952...Mission No. 5801. The squadron commander was flying lead and I was in the No. 4 slot. The mission was to the central highlands and was an easy one with no reported flak. The flight joined up after take off and proceeded to the target, where we prepared for the bomb runs. The lead went down and dropped his bombs...at that time there was a huge explosion at 12 o'clock to his bombs. No. 2 called out that lead had crashed. After dropping our bombs we rejoined and returned to base.

"As we were taxiing in, our squadron operations officer was taxiing out with a training flight to the bombing range with a load of three pound practice bombs. About forty-five minutes later, it was reported that he had crashed while on a bomb run at the range. One wing had broken off his aircraft. We had lost both of our squadron leaders in less than one hour. All of our D models were immediately grounded. Soon after this, we began receiving new F–84G models. These new Thunderjets were a much better aircraft than we had been flying. As soon as we had our full complement of the new Gs, we resumed our bombing missions up around Pyongyang."

F–86F SABRE

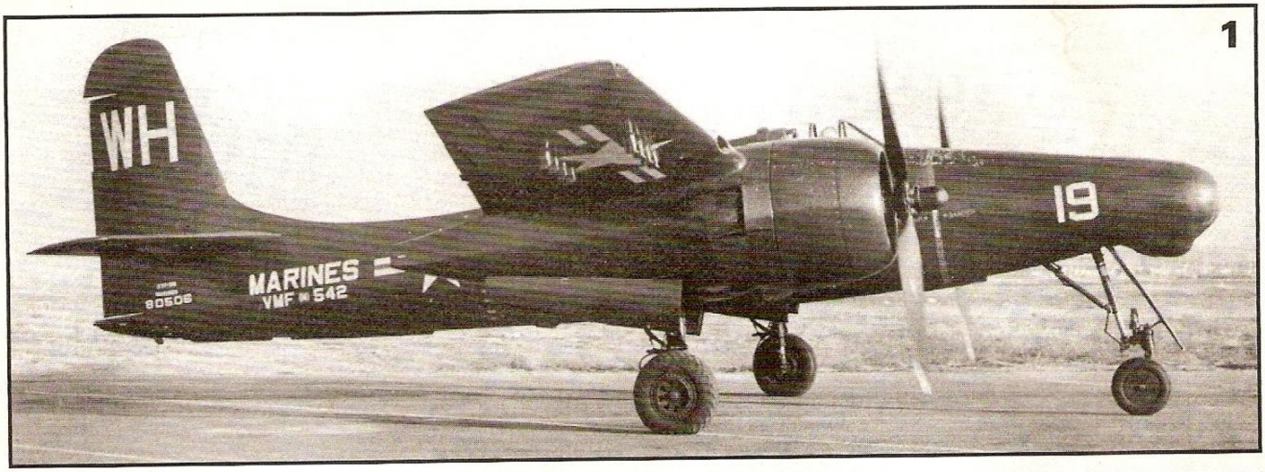
Major Howard Ebersole
12th Fighter Bomber Squadron
June 10, 1953

Mission: Interdiction against Chinese supply dump north of the front lines with the new Sabre Fighter-Bomber.

"I was leading D Flight, with Captain Bob Coury leading one of the elements. On paper, it appeared to be a routine mission, but it proved to be anything but that! I found the target, lined it up with the sun at my back and rolled over into a 45-degree dive. I put the manual pipper on the target and at about 3,000 feet I "pickled off" two 1000 lb. bombs. At the time, I didn't recall seeing any flak. Then the other three in the flight dropped their bombs.

"As Lt. Shattuck pulled up, his bombs set off some huge secondary explosions. As Capt. Coury rolled in, one of the guys yelled to watch the flak, as it was getting too close for comfort. At this point, there was no doubt we had stirred up a hornet's nest. Coury radioed that he had been hit. As I glanced over to check him out, I noticed he was streaming a 100-foot torch out of his tailpipe. I told him to try and make it back over into friendly territory by steering one-eight-zero. He just cleared "Old Papa San" mountain (occupied by the enemy) and as he got it over the other side, punched out. His Sabre exploded as soon as he ejected and he parachuted safely to the ground.

"As I dropped down to check out the burning wreckage, I noticed a huge man emerge from a cave and climb onto a "Quad-fifty" Triple-A gun emplacement. My nose was pointed squarely at him, and as I squeezed the trigger, my .50 caliber rounds converged right into him. The gun emplacement and gunner exploded right in front of my eyes! Captain Coury was captured and repatriated at the end of the war. We lost a lot of aircraft and several good pilots on these types of missions."



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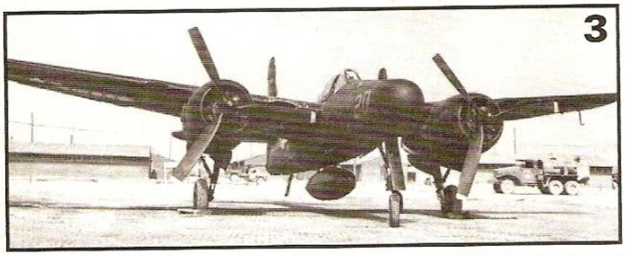
1. When war erupted in Korea, U.S. Navy immediately began deploying all available naval and marine aircraft to the theater. This Grumman F7F–3N nightfighter from VMF(N)-542 is shown on a stopover at Los Angeles International. F7Fs later operated from K-1 airstrip near Pusan, flying up to 18 missions per night in the summer of 1950.

2. The other veteran F7F nightfighter squadron was VMF(N)-513. Among the experienced pilots on its roster was Capt. Robert Baird, the only Marine Corps nightfighter ace of World War II. Between April 1 and June 30, 1951, 513 claimed nearly 1,500 enemy vehicles destroyed.

3. A photo-recon F7F–3P over Korea in the spring of 1952. Twin-engined heavy fighter was equipped with four 20mm nose cannon and four .50 caliber machine guns in its standard configuration, but its machine guns were deleted in the 4N model.

4 & 5. The Douglas F3D Skyknight was not lovely to look at, but it performed well. The Navy's and Marine's first jet nightfighter, prototype made its maiden flight in February, 1950, arriving in Korea eighteen months later. Although underpowered, it was very dependable and its radar system was extremely proficient. A sitting duck in daylight, the F3D ruled the night. It flew 20 to 50 mile barrier patrols ahead of B–29 bomber formations, and no B–29s were ever shot down when accompanied by the F3D, which scored the first jet nightfighter victory of the war on November 1, 1952.



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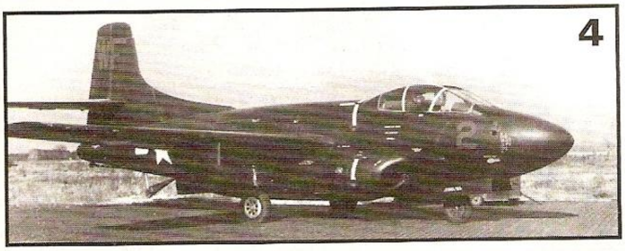

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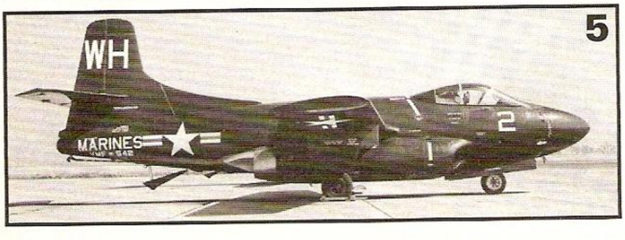

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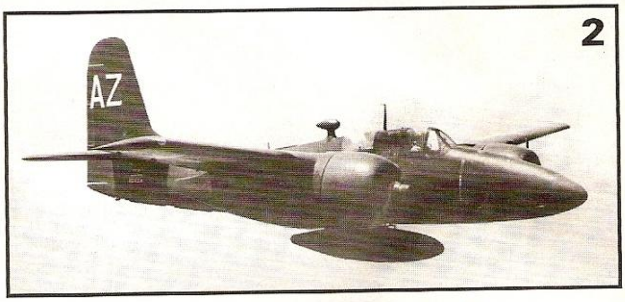

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AIR WAR OVER KOREA

(Text continued from page 24)

provided cover. (For full story of the F–94 and F3D, respectively, see *Wings* April, 1982 and *Airpower* January, 1986, available in back issue. For F7F and F4U see *Wings* October, 1989.)

By the time battlefield action ceased in the summer of 1953, American air forces had attained a remarkable level of proficiency and training; their equipment and weaponry was judged the best in the world; their system of supply and maintenance was extremely efficient; their tactical formations became a model for others, while their pilots had achieved a reputation for unrivaled professionalism and combat readiness. When matched with a genuine sophistication for mission planning, stemming from a new crop of dedicated and knowledgeable commanders, the USAF and its naval air counterparts now formed the mightiest dual service aerial component in the world.

This unmatched capability was underscored throughout the balance of the Fifties, Sixties, and well into the Seventies, when the performances of Air Defense, Tactical and Airlift Commands were generally without peer. All of which complemented mighty Strategic Air Command, the most formidable weapons deliverer ever to exist, with a destructive capability in aircraft alone that would be considered extremely dangerous today, if any other nation possessed it.

The hard lessons in tactics, armaments, training, supply, maintenance and coordination learned and then honed to a fine edge in Korea, would stand the military air arms of the United States in good stead nearly twenty years later over Southeast Asia. Unfortunately for the men who had to fly and maintain the planes and plan their missions, an unpopular war with hazy goals would do more to inflict casualties than a determined enemy.

In Korea, after a disastrous and disorganized combat plan – or the total absence of one – the air and ground forces of the

(Text continued on page 38)

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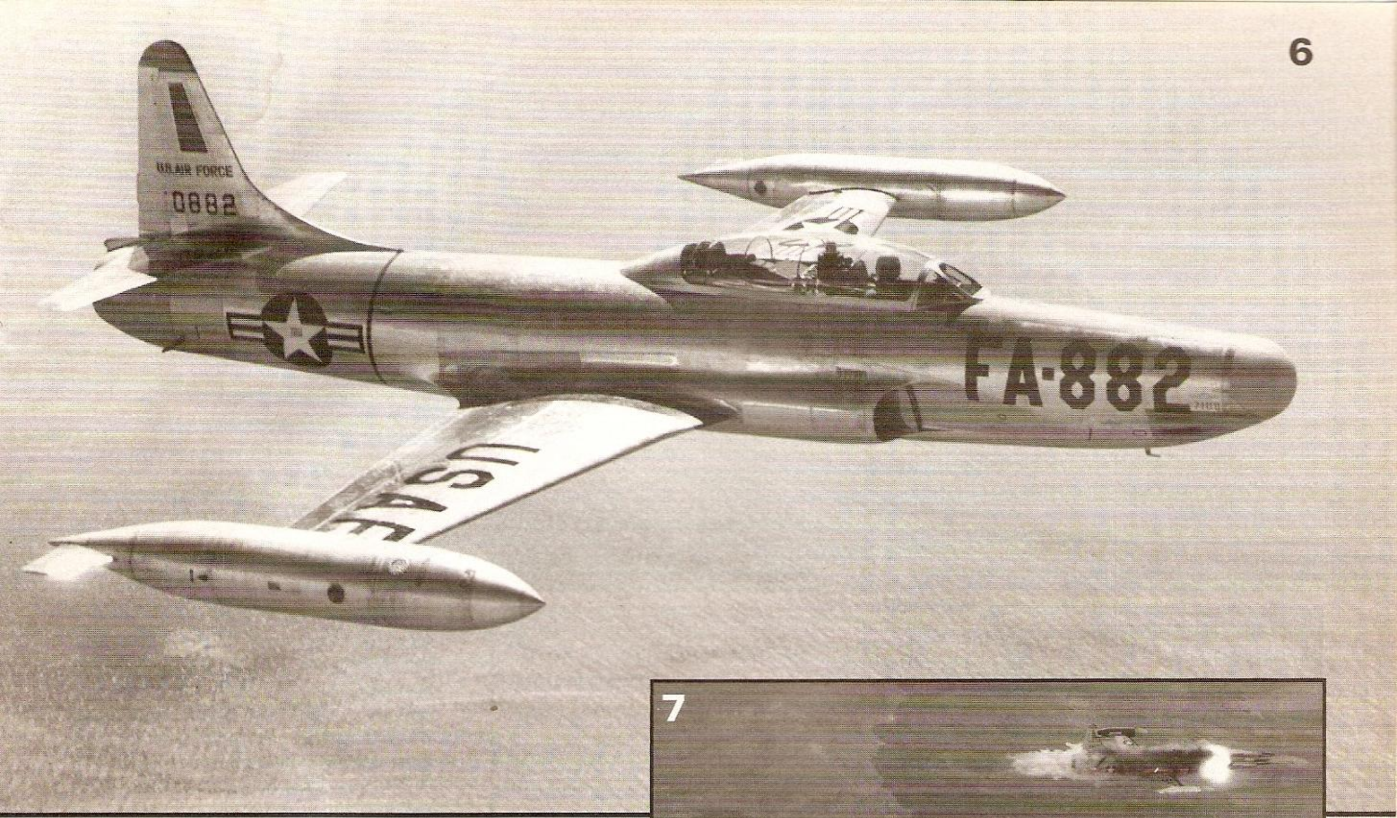

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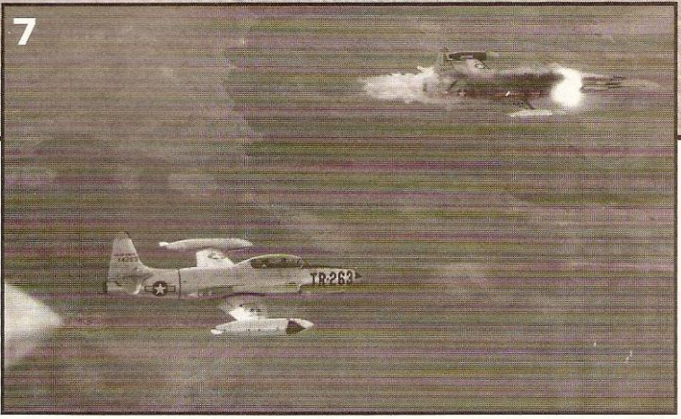

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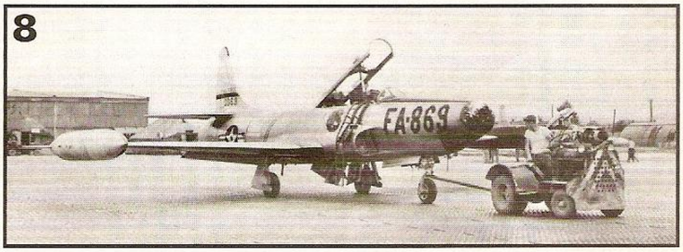

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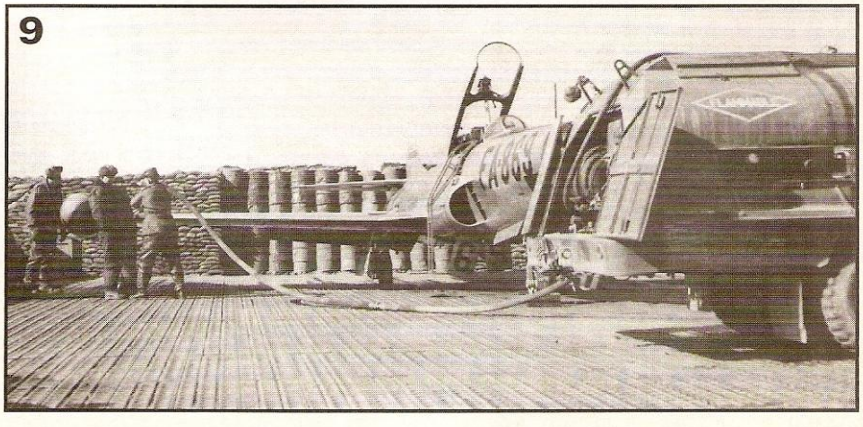
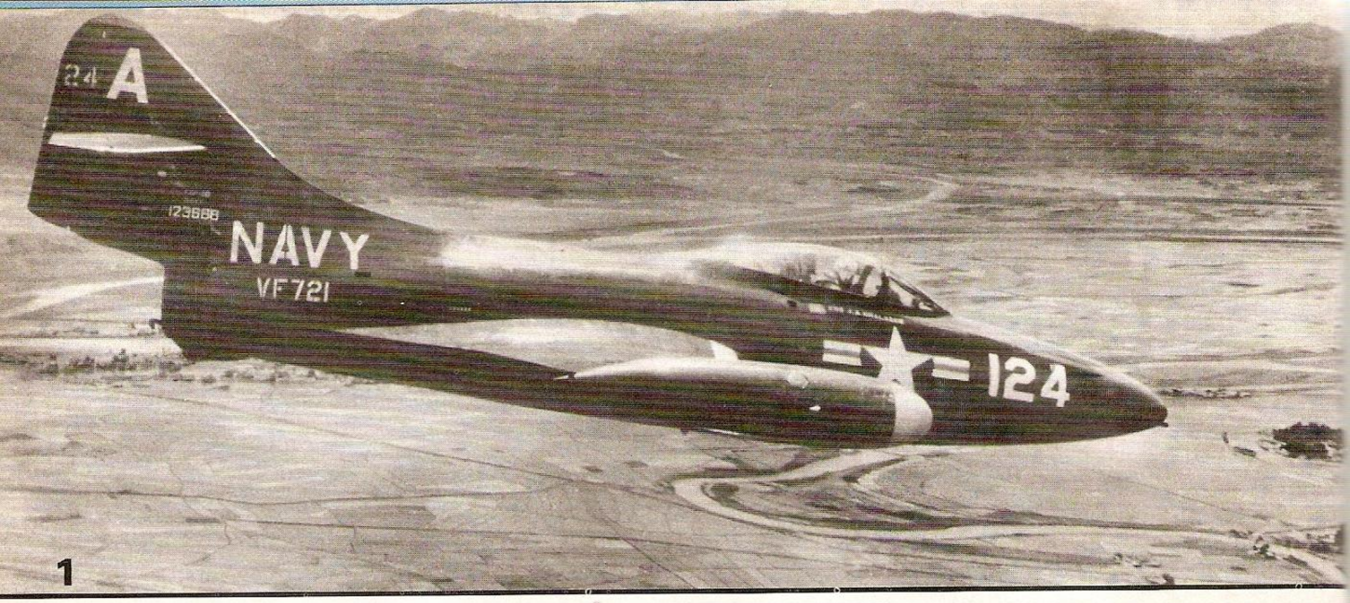


6. Lockheed's F–94 Starfire was a fill-in conversion from the company's T–33 two-seat trainer, made necessary when the Air Force's built-for-the-purpose nightfighter, Northrop's F–89 Scorpion, experienced production delays. T–33 airframe was lengthened to make room for radar equipment, while the fuselage was widened to accept a more powerful engine with afterburning. Air intakes were enlarged and the tail was redesigned to produce the YF–94. Only two squadrons equipped with the F–94 saw service in Korea, where they flew just under 4,700 missions; most of these were F–94Bs (shown), some twenty eight of which were lost, mainly to accidents.

7. With a T–33, which sired it, flying the Starfire's wing, this F–94B is shown firing 2.75-inch rockets from pods during trials over the mountains of California. F–94B had a top speed of 606 mph. at sea level, a cruise of 452 mph., and a range of 900 miles with external fuel. Armament was up to eight .50 caliber machine guns. In the larger, more advanced C model, 48 rockets were the primary armament, but they saw no action in Korea.

8. Sent to Korea to stop nocturnal enemy intrusions, the F–94 was the wrong aircraft for the job, primarily because the Communists used old wood and wire Po 2 utility planes to bomb U.S. strips and disturb the sleep of personnel. These usually swept in low, under the radar, and were lost in the ground clutter. Furthermore, the F–94 could hardly slow down enough to destroy the intruders, on occasion stalling out in an attempt to do so. However, USAF desperately needed a bona fide nightfighter and operational testing continued despite what amounted to a mediocre record of interception. This F–94B is from the 319th Sqdn., and is seen in March, 1952.

9. A 319th F–94B being refueled at Suwon, South Korea, for a night mission escorting B–29s, as the threat from MiG–15 interceptors grew in the fall of 1952. Prior to arrival of 319th, the 68th Sqdn. based in Japan, which had recently converted to the F–94, detached two of its Starfires to Suwon for night interception, beginning in December, 1951.



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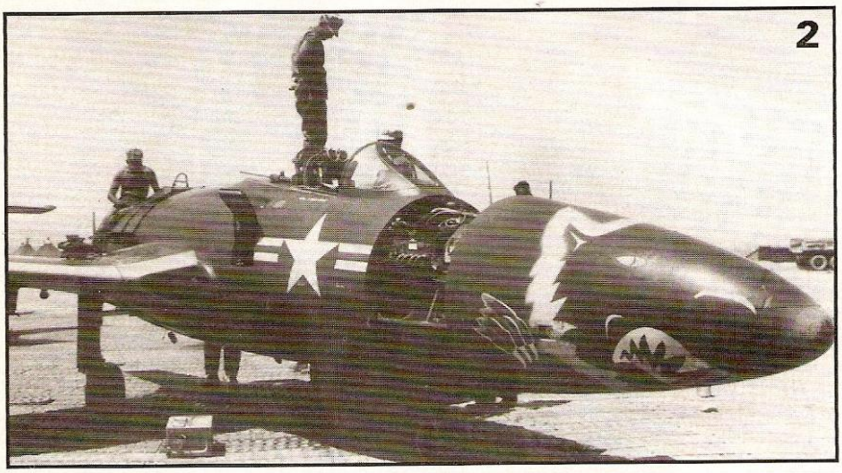

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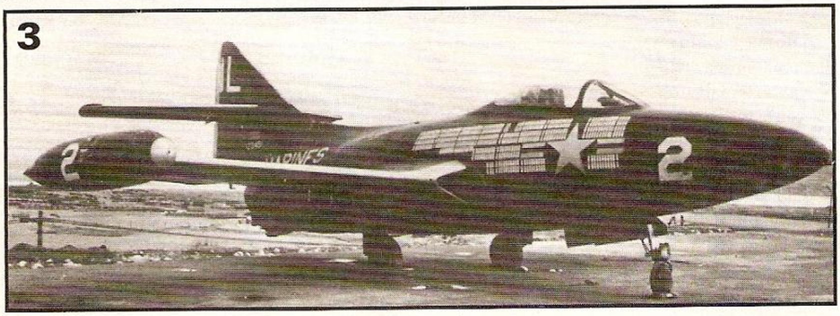

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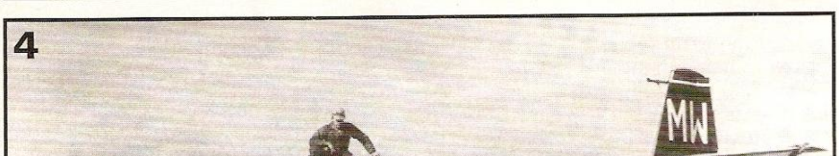

1. Just as Grumman fighters bore the brunt of the airwar in the Pacific with the F4F and the F6F, they returned for an encore in Korea, five years later, in the form of the F9F Panther. (For full story of F9F in Korea, see *Wings* June, 1997, available in back issue.) Here, a Naval Reserve F9F–2 from *USS Boxer's* VF-721 is shown over the Korean countryside in June, 1951.

2. Some aircraft have the requisite snouts for giving squadron artists free reign to project their special marking talents. This F9F–2 from the 1st Marine Air Wing at Pohang, on the east coast of South Korea, is dolled up with teeth and claws during maintenance. Initially flown in November, 1947, Panther was Grumman's first jet fighter, and 567 of the F9F–2 production model were equipped with P&W J42 engines generating 5,750 lbs. of static thrust. Another 54 –3 models with Allison J33s were later brought up to F9F–2 standards. The Panthers first saw action on July 3, 1950, when they shot down two propeller driven Yak–5s, while operating from *USS Valley Forge*. F9Fs also claimed the first Navy MiG–15 shootdown that November.

3. VMF-311 was the Marines' most successful operator of the Panther. This F9F–2B was one of several specially modified with strengthened wings for ground attack. When photographed in late 1952, it had already flown 445 combat missions in less than eighteen months.

4. McDonnell's F2H Banshee fared less well in Korea. Although 367 had already left assembly lines before the first F9F–2, it wasn't until the summer of 1951 that the first Banshee arrived in Korea to join combat, flying from *USS Essex* to escort B–29s on a high altitude raid against North Korean railyards. Faster than the F9F, but less robust, the Banshee was later switched to photo-reconnaissance. This F2H–2P, one of 89, was operated by VMJ-1 from Pohang (K-3), South Korea as part of the 67th Tactical Recon Wing at Kimpo. It was unarmed, its nose elongated to carry cameras. Combat equipped, Banshee carried four 20mm cannon.

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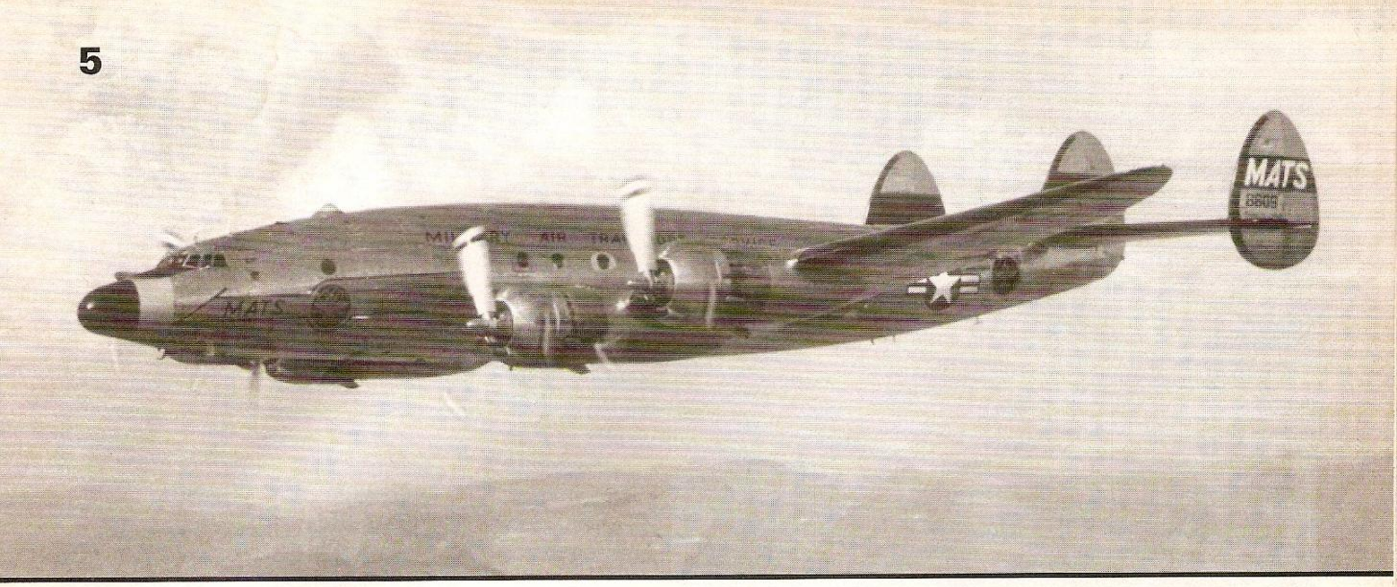

5. If an army marches on its stomach, an air force survives by virtue of rapid air resupply. Here, one of Military Air Transport Service's (MATS) Lockheed Constellations makes the long flight from Sacramento to Korea, via Hawaii, Midway, Wake, Guam, Japan. Fourteen early C–69s were used for priority cargo, later reinforced by larger C–121, one of which, *Bataan*, served as General MacArthur's personal transport. In all, the USAF purchased twenty-two C–69s, ten larger C–121s, thirty-two still larger C–121Cs, and also obtained 32 Navy versions of the same plane, most of them for service with MATS.

6. The bulk of cargo moved in and out of Korea was carried aboard the older reliable twin engined Douglas C–47 and four engined C–54, shown here. This C–54 is delivering bombs and fuses to F–51 units flying out of Kimpo in September, 1950, shortly after it was recaptured following the Inchon landings. After World War II, the Air Force retained several hundred C–54s and when MATS came into existence in June, 1948, 234 C–54s were still operating with it. During the Korean War MATS received more and operated three full C–54 divisions (225 aircraft) with the 61st and 62nd Troop Carrier Groups employing another 80, thirty of which were specially modified to carry litter cases.

7. Too late for World War II, Fairchild's C–85 transport/troop carrier also failed to see service in Korea, but its immediate successor, the C–119 (shown here), became the workhorse of Combat Cargo Command. Excelling at low level supply drops, C–119 Boxcars were instrumental in several successful insertions of troops behind enemy lines. After participating in the relief and supply of the Marines during their breakout from the Chosin Reservoir, C–119s of FEAF hauled 165,000 tons of equipment during the war and air-dropped another 18,000 tons, while carrying more than 30,000 paratroopers and evacuating 5,000 wounded. For full story of both C–85 and C–119 see *Airpower*, November, 1996, available in back issue.

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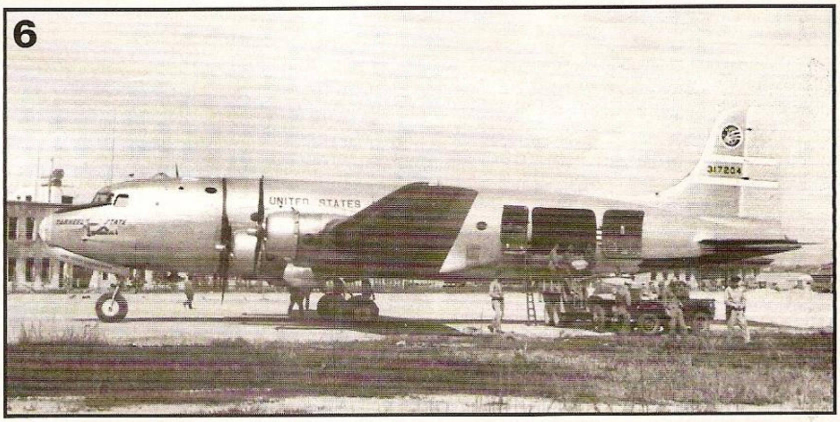

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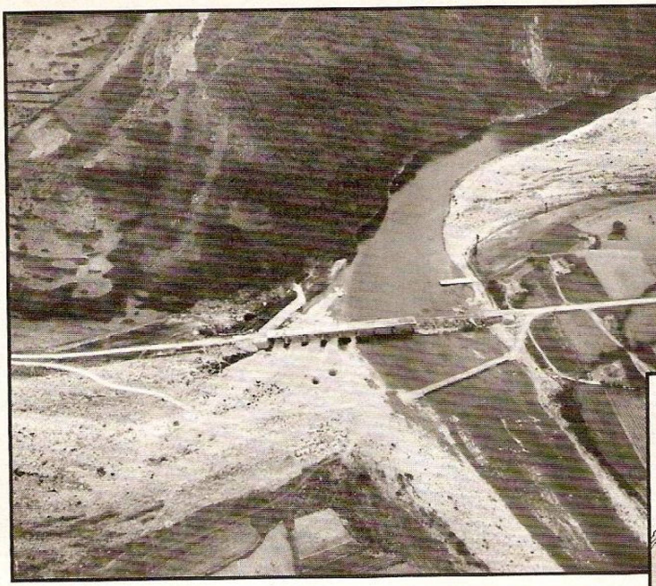
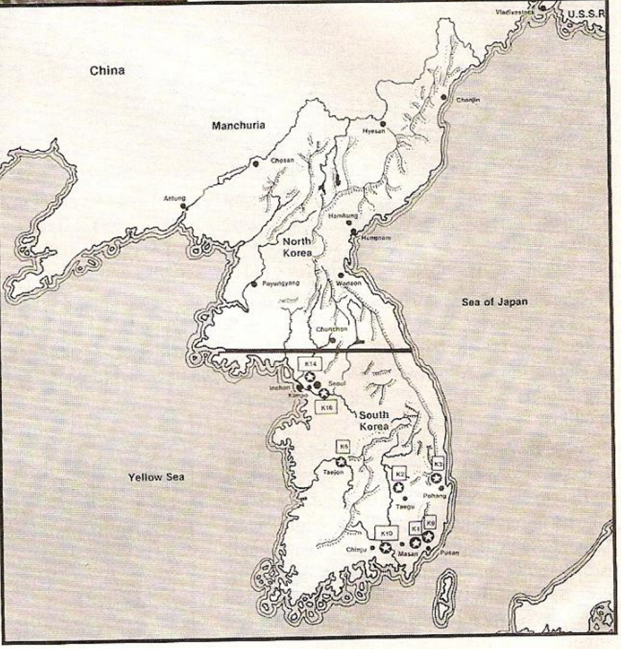


The industriousness of the enemy drove U.S. target mission planners in Korea to distraction. *USS Boxer's* air group took out this highway bridge along a major Communist supply route. Two days later an alternate structure was in place, below it. Shortly after this photo was taken, VF-721 Panther jets from *Boxer* knocked it down a second time, and probably had to return on several more occasions to keep it out of commission.

Theater of Operations Korea 1950 – 1953.



United States and the United Nations were able to rectify their early mistakes and turn what looked like certain defeat into victory, even if it was followed by forty seven years of a shaky armed truce. In Vietnam, despite overwhelming superiority in arms and equipment, the very absence of a focused plan, which seemed to change weekly, led to tremendous casualties to no purpose. In effect, Korea was the right war at the wrong time. Vietnam was the wrong war at any time, particularly for those forced to fight it.

The first woke the U.S. to its military shortcomings and eventually gave rise to a crack military force, particularly in the air, a result that made the Soviet Union less sure of itself and more wary about future confrontations. The second nearly crushed the spirit of the military and exposed foolhardy, wrongheaded policies imposed by a remote power structure far away in Washington. Today, Vietnam is never far from our memory, while Korea is nearly forgotten, perhaps because America tends to take her victories for granted, and dwell instead on her defeats.

Was it worth it? Fifty years from the opening gunfire, South Korea is enjoying unprecedented prosperity and has emerged as a relatively wealthy manufacturing nation, whose democratic government is chosen by popular vote. Contrast that with North Korea, where a cowed population, under a military dictatorship, starves on a regular basis, and the army continues to wield absolute power. One reason why 37,000 U.S. servicemen still man posts on that troubled peninsula.

Joe Mizrahi

F-86E Sabre

Lt. Colonel George Jones
4th Fighter Group
Kimpo Air Base (K-14)

Pilot briefing for escort mission of fighter-bombers over MiG Alley. Mission date: 2 November 1951

"The frost on the ground was so heavy, it looked like it had snowed. The first glints of orange were showing on the horizon and it looked like it would be a cloudless day. I was giving the briefing this morning and all the pilots seemed to be talkative and excited. This was because we were going to fly top cover for a maximum effort by F–84s and they would probably draw the MiGs up. I looked up on the big map and there were two grease pencil lines on it. The blue line showed the track of the fighter-bombers and the red line tracked us from here at Kimpo to the target area.

"After the weather and intelligence briefings, I gave mine...in the target area, Red Flight will be at 35,000 feet, Blue at 25,000 and White at 20,000. Our primary mission is to protect the fighter-bombers from the MiGs! Keep your speed up at all times. For the most part, the pilots on this mission were all experienced and had a lot of missions over the Alley. However, there were a couple of young pilots who had recently joined the squadron.

"We will meet up with the fighter-bombers about halfway to the target and we'll go ahead and be on station by the time they come into the area. If we get a chance to box up some MiGs, that's O.K., but the safety of the bomber guys comes first! For you young pilots who are going to be with us, here is one rule you need to know: In making an attack on a MiG, the flight leader is the shooter! The job of the wingman is to keep him and the shooter clear. The shooter is absolutely padlocked to his target, totally focused on the pipper. If I happen to be the shooter, I don't want any surprises! Understood? So...hack time...in 15 seconds it will be 0645 hours. We will start engines at precisely 0730.

"We didn't have to wait long for the opposition to take off from Antung. I ended up in one of the most aggressive and heart stopping dogfights that I could ever imagine. The MiG pilot was definitely a "honcho" (term given to what was believed to be enemy instructor pilots who were far above average. Only coming to light a few years ago, these were, indeed, experienced Soviet or Warsaw Pact pilots with World War II experience). I stayed on this guy and ended up firing out all my ammunition. I finally called my wingman in to help finish him off. In a final effort to escape, the MiG pilot pushed over into a steep dive and his shot-up fighter just couldn't take the stress. It snap rolled to the left and broke up. The pilot ejected and we saw it hit the side of a mountain. This kill was shared with my wingman."

[Lt. Colonel Jones went on to become the 30th jet ace of the war with 6.5 confirmed kills.]

F-84 Thunderjet

Pilot: Captain Eugene Duffy
49th Fighter Bomber Group

MiG–15 Encounter.

"We were briefed for a mission against a Tank Training School north of Pyongyang. The weather was bad with a heavy cloud base at 2,000 feet and threat of rain. After take off, the violence of the turbulence we encountered during climb out surprised me. We were not able to stay in flight formation and quickly scattered. By the time we reached our target area, there was no sign of the other twelve aircraft, although the weather had lightened somewhat.

"We four let down through a hole in the clouds and quickly spotted our target. We lined up east to west and dropped our 500-lb. bombs, destroying several buildings. There were no secondary explosions. We lined up for a second pass to fire off our 5-inch rockets. Being "Tail End Charlie," I fired my guns so I would get some pictures of the strike damage. As I rolled off the target, I noticed the other three in my flight were a mile ahead and already climbing into heavy cloud cover. I firewalled my aircraft, but I knew they would be gone in the clouds before I could catch up. Suddenly, I began to take fire from behind. At first, I thought it was ground fire, as I failed to zigzag off the target, which was standard procedure. As I turned, I could see not one, but two MiG–15s on my tail!

"I was surprised as hell! MiGs coming as far south as Pyongyang were not customary and they had caught me low, but fortunately, not slow. I was approaching 450 knots trying to catch up with the group, so I pulled the stick back in my gut and headed for the cloud cover with two MiG–15s in pursuit. For the next few minutes, I dodged in and out of cloud layers trying to lose my pursuers. Somewhere n the turmoil, one of the MiGs disappeared and only the one was trying to finish me off. I took several hits but none seemed to damage the Thunderjet's performance. I remembered conversation on the topic of mixing it with MiGs and the supposition was the lower the altitude, the better chance you had.

"I split-S from about 3,000 feet and popped my dive brakes to keep from pulling the wings off. I pulled out at about 300 feet off the deck and immediately started a multiple G turn in time to my pursuer, who flew straight into the ground. I have no idea what happened to him. He was flattening out and hit the ground directly on his belly and promptly exploded in a large fireball. After flying all the way back to base, in the clouds, my crew chief found it hard to believe that all the holes in my F-84 were a result of a MiG–15 encounter."

F-82G Twin Mustang

Lt. John L. Redrup
Pilot: 4th All Weather Squadron

"With the war only a day old, we were sent from our base on Okinawa to Itazuke AB, Japan, to help with the situation in South Korea. The base was a hotbed of activity with about 75 F–80s and 30 F–82s. We flew a few missions covering the evacuation of Americans from Korea by aircraft and ship. Our fighters did not encounter any enemy aircraft during this operation.

"However, a few days later, it began to get exciting. One night we were at a club close to the base when a colonel drove up in a jeep, jumped out and shouted for all F–82 crews to get down to Ops and scramble because there was a flight of unknown aircraft approaching the base. When we arrived, all of the F–82 crews were milling around. We were told to jump in the first aircraft we came to, grab a radar observer and take off. When I got to my regular aircraft (#390), my R/O Paul Brown was waiting for me. We fired up and started to taxi when it dawned on me that the entire base was blacked out! I was not familiar with the airfield layout, so with Paul's help, we crept around the taxi strip toward the runway. When I thought we were near the active, I radioed the tower to see if they would flash the lights so that I could find the runway. The lights flashed on as I turned onto the main; they went off again. I had enough residual vision to line up and start rolling. Somehow we lifted off safely.

"Then the fun began. GCI told me to climb to 5,000 feet and orbit Point Utah. I had no idea where or what he was talking about, since I was new to the area. During all of the confusion, the radio channels were going crazy with about thirty F–82s milling around in the dark at all altitudes and positions. Suddenly, one of our pilots got the call to close in on one of the intruders and he immediately called back that he was being fired on. Turned out the "intruder" was an Air Rescue B–17. It ended up that the unidentified aircraft coming toward the base were B–26 Invaders. During all of the scrambling, one thing stands out. Yes, the entire airfield was blacked out, but the rotating beacon on a nearby mountaintop was merrily sending out a green and white beam the whole time!

"That short period that we were working over South Korea was action packed. Although we did not tangle with North Korean aircraft, like the 68th Squadron did, we were very busy. One morning, we were briefed to escort a C–54 from Japan into Korea. It was General MacArthur and his aircraft, Bataan. Later, he mentioned us in an interview with Stars and Stripes. He told the reporter that he was reassured on his flight into the forward area because of his "P–38 escorts!"

Captain W.C. Rockwell USMC

Pilot: F7F-3N Tigercat VMF(N)-542 &
Forward Air Controller with ROK Capitol Division

Early months of the war (Oct-Nov. 1950).

"We brought our Tigercats over on the USS Cape Esperance (CVE-88). It didn't take us long to get into the action. We did a lot of close air support around the front lines, but the front was moving so fast to the north, there were not too many good targets. We were flying out of Kimpo AB and ranging out all over North Korea searching for targets of opportunity.

"By the middle of October, the First Marine Division was badly in need of more Forward Air Controllers. I was immediately given permission to join the Division. We went, by boat, up the east coast of Korea to join in the amphibious landing at Wonsan Harbor. There was a two-week delay in entering the harbor because of the tedious job of clearing out all the mines. By the time I got on shore, it seems that the Republic of South Korean ROK Capitol Division had pushed the retreating North Koreans out, so I was assigned additional duty with the 5th Marine Tactical Air Control Party to catch up with the ROKs and provide air support.

"We saw plenty of action and the North Koreans put up a lot of resistance in some areas. We were always worried about infiltrators. One cold night, I recall hearing a commotion outside our tent. There were a few gunshots and then silence. The next morning as we left our tent, there were two bodies outside, with bullet holes in their heads. They were part of a terrorist group that was trying to destroy our team of forward air controllers.

"Just as we figured the war was over, we got word that the Chinese had entered the conflict up around the Chosin Reservoir. At that point, our ROK division set up normal retreating procedures. The rear-most regiment set up defenses and allowed the other two regiments to pass through and, in turn, they would set up defenses allowing the first defensive unit to pass through…and so on. The situation deteriorated quickly. The retreat picked up speed, as there was a chance we would be cut off. It was chaotic. The ROKs confiscated any and all vehicles that would move. Trains were commandeered to carry troops south. I can remember one tragic event when some of our Capitol Division got a lift on a train that was heading south as fast as it could go. It entered a tunnel and had a head-on collision with a train coming north. Those men that were injured and unable to move were put out of their misery with a single shot to the head! The commanders of the retreating ROKs were not going to be slowed down by anyone or anything!

"You haven't witnessed a war unless you are on the ground. To have been a FAC in Korea was a real eye-opener. There was plenty of action and you saw things that you could never have seen or heard from the air. I feel we were very effective in calling in the strikes on enemy positions and that probably saved a lot of lives. It was an experience I will always remember."

Mapping Alaska

Editor's Note: When U.S. Secretary of State, William Seward, negotiated the purchase of Alaska from Russia's tsar, shortly after the Civil War, the place was derisively called everything from "Seward's Folly" to "Seward's Snowfarm," and declared a waste of seven million dollars. Except for a few hardy souls, Alaska would remain a virtual mystery for the next half century. Then, in 1923, after having barely investigated its frontiers and general outlines, the U.S. Navy decided to map most of southern Alaska and the adjacent Aleutian Islands from the air.

Over the next thirteen years, intrepid naval survey pilots attached to six expeditions, flying mostly in rickety open cockpit aircraft through good and bad weather, would photomap hundreds of thousands of square miles, without a major accident, and all at a negligible cost that would not fuel a two-ship flight of Grumman F–14 Tomcats for a single mission.

It Took Six Expeditions Twelve Years To Photograph Alaska From The Air. During That Time, Planes Grew More Modern, But The Problems Encountered Over That Rugged Wildness Hardly Changed!

By Jim Ruotsala

Photos courtesy Sitka Historical Society, USN, National Archives, U.S. Forest Service, Alaska State Library, Godkin Family, Lloyd Jarman, Kodiak Historical Society, Peter M. Bowers.

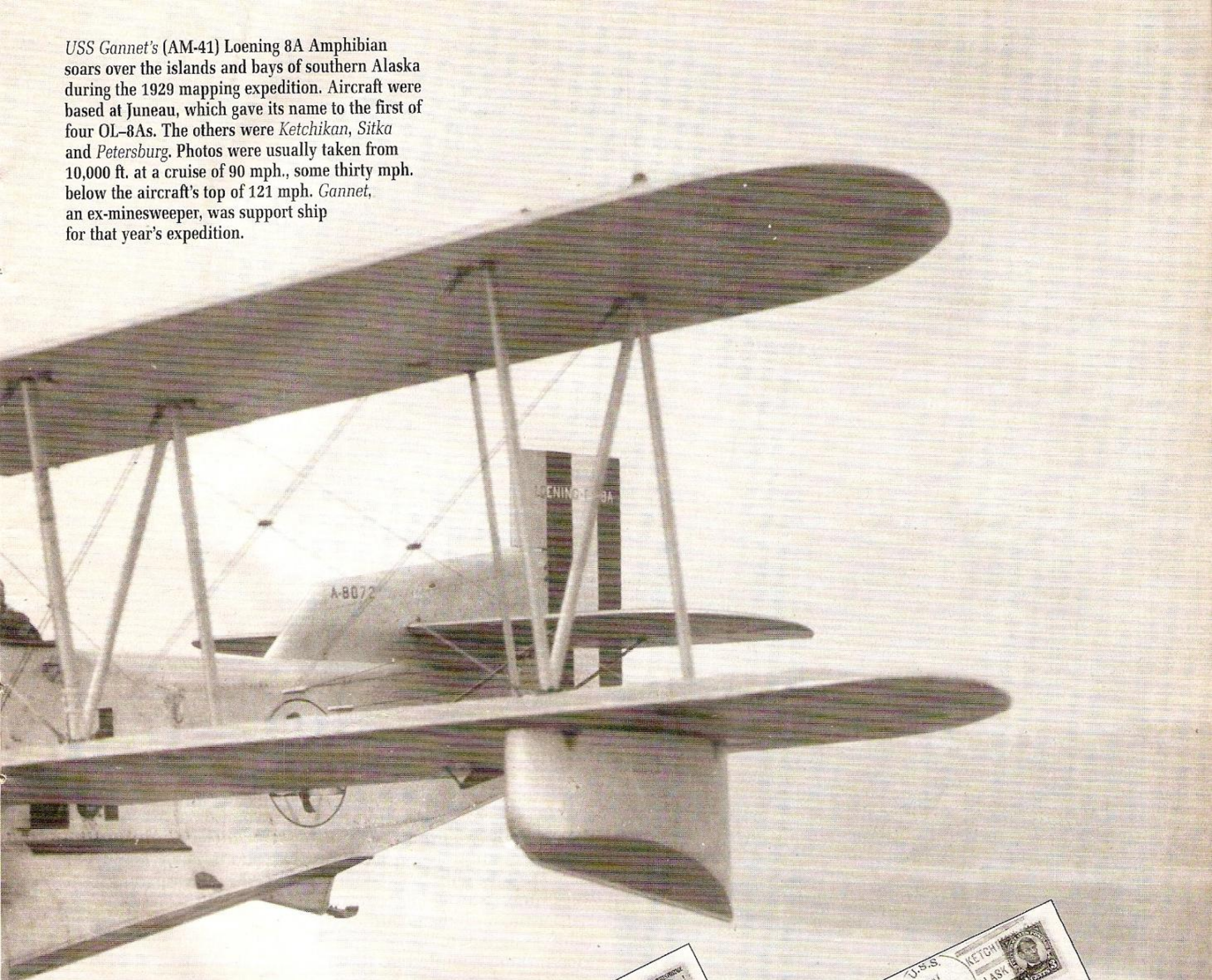
In the 1920s and 1930s the U.S. Military undertook to do the first aerial photographic surveys of large tracts of Alaska's southern coast. In six surveys – 1923, 1926, 1929, 1932, 1934 and 1935 – much of southeastern Alaska (The Panhandle) and parts of south central (Prince William Sound and the Kenai Peninsula) and southwestern Alaska (the Aleutian Islands) were completely and accurately photographed within the time allowed.

Not only was this accomplished without a serious accident and over the foggy and stormy wilds of that North Pacific Coast, but at a time when aerial photography was in its infancy, and flying itself was undependable, if not risky. The aerial photographs taken were found to be exceptionally useful in fostering Alaska's economic development, particularly in the field of forestry, and when World War II came to Alaska, were found to be invaluable. What follows is an account of that survey work.

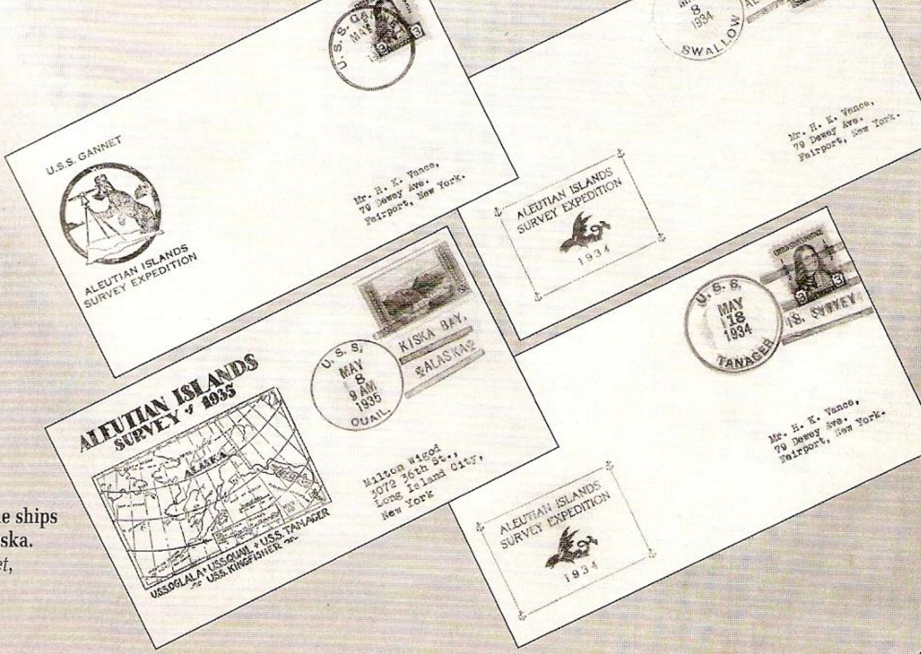
On Friday, June 1, 1923, the U.S. Navy sent the tanker *USS Cuyama* (AO-3) from Port Angeles, Washington, to the Dutch Harbor area to do survey work in the Aleutians. The ship was commanded by John H. Blackburn and carried two Davis-Douglas DT torpedo planes identified as 2–T–2 and 2–T–4. Piloting the aircraft were Lieutenant Commander J.H. Stevens and Lieutenant Commander Nathan B. Chase. In addition to the pilots, each aircraft had a gunner-observer and a photographer. Their cameras would be used to photograph possible shelters and anchorages for use by naval vessels.

Upon completion of their work in the Aleutians the planes made their way to Cordova. On August 2, the support ship weighed anchor and headed for Yakutat where she anchored the next day.

On August 4, Pilot J.H. Stevens flew the 2–T–2 to make a survey of Yakutat Bay. He was brought back aboard that afternoon and the ship got underway, heading for Sitka, Alaska.



USS Gannet's (AM-41) Loening 8A Amphibian soars over the islands and bays of southern Alaska during the 1929 mapping expedition. Aircraft were based at Juneau, which gave its name to the first of four OL–8As. The others were *Ketchikan*, *Sitka* and *Petersburg*. Photos were usually taken from 10,000 ft. at a cruise of 90 mph., some thirty mph. below the aircraft's top of 121 mph. *Gannet*, an ex-minesweeper, was support ship for that year's expedition.


U.S.S. GANNET
ALEUTIAN ISLANDS SURVEY EXPEDITION
Mr. H. K. Vance,
79 Dewey Ave.
Fairport, New York.
U.S.S. MAY 8 1934 SWALLOW
KETCH ALASK
ALEUTIAN ISLANDS SURVEY EXPEDITION 1934
Mr. H. K. Vance,
79 Dewey Ave.
Fairport, New York.
ALEUTIAN ISLANDS SURVEY of 1935
ALASKA
USS.OGLALA • USS.QUAIL • USS.TANAGER USS.KINGFISHER
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Milton Wigod
3072 36th St.,
Long Island City,
New York
U. S. S. MAY 18 1934 TANAGER
AL. IS. SURVEY
Mr. H. K. Vance,
79 Dewey Ave.
Fairport, New York.
ALEUTIAN ISLANDS SURVEY EXPEDITION 1934

Cancelled postal covers from the ships of the U.S. Naval Survey in Alaska. *USS Swallow*, 1934; *USS Gannet*, 1934; *USS Tanager*, 1934; and *USS Quail*, 1935.

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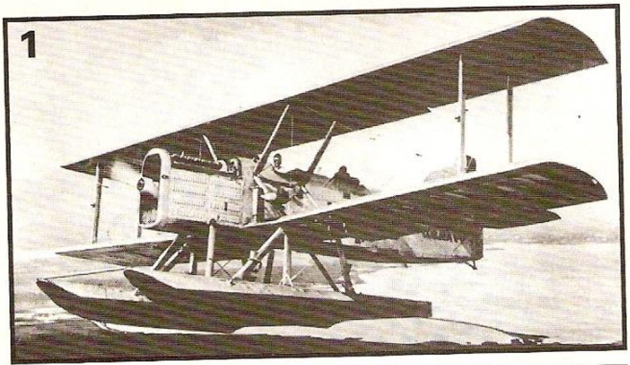

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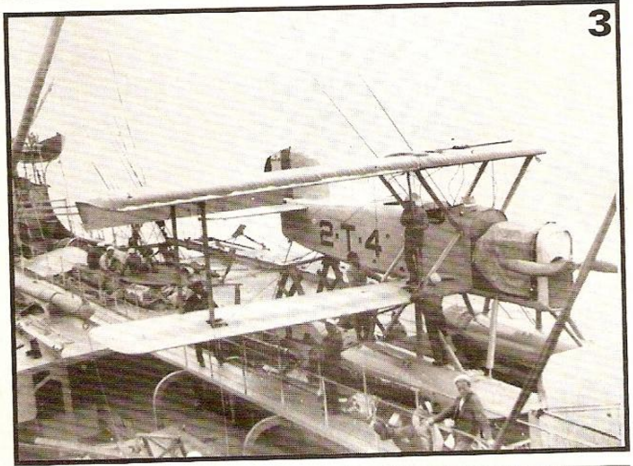

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1. A Douglas DT–2 gets airborne from Sitka. The torpedoplane was a near cousin to Army's round-the-world cruisers of 1924. Maximum speed was 101 mph., service ceiling, 7,800 ft.

2. Same aircraft on wheels, with spare tire lashed below cockpit.

3. DT–2 aboard *USS Cuyama* in August, 1923, one of two carried that first year.

4. Two naval photographers from the 1926 expedition show off their bulky vertical tri-lens cameras, which produced remarkably detailed pictures, each exposure covering 7 to 10 square miles from 10,000 ft.

5. Naval tanker, *USS Cuyama*, refueled ships during 1923 expedition, after bringing the first aircraft (Douglas DT–2) to Sitka.

The *Cuyama* arrived in Sitka on Sunday, August 5. The next day 2–T–2 was lowered at 9:30 a.m. and lifted off the water on a trial flight. Although the takeoff was uneventful for the aviators, it was anything but that for the gathered residents of Sitka whose isolated fishing port had never before heard the roar of an airplane!

USS Cuyama stayed in Sitka for several days, waiting out the rainy weather, and on August 14 sailed for Ketchikan, after conducting a survey of the harbor and Baranof Island. On August 23 the ship headed for Port Angeles, Washington. Two days later she departed for her homeport, San Pedro, California, and at the end of August, the men and machines were assigned to other operational squadrons within the Fleet, thus completing the first Naval Aerial Survey of Alaskan waters.

Three years later, on August 12, 1926, the *Daily Alaska Empire* in Juneau heralded the arrival of Lieutenant Ben Wyatt of the U.S. Navy and the Alaska Aerial Survey crew. They had come north to do mapping in Southeast Alaska, arriving in Ketchikan in early June, traveling via Sand Point in Seattle. Operating out of Ketchikan for several weeks, they covered all of the southern end of the district, then moved

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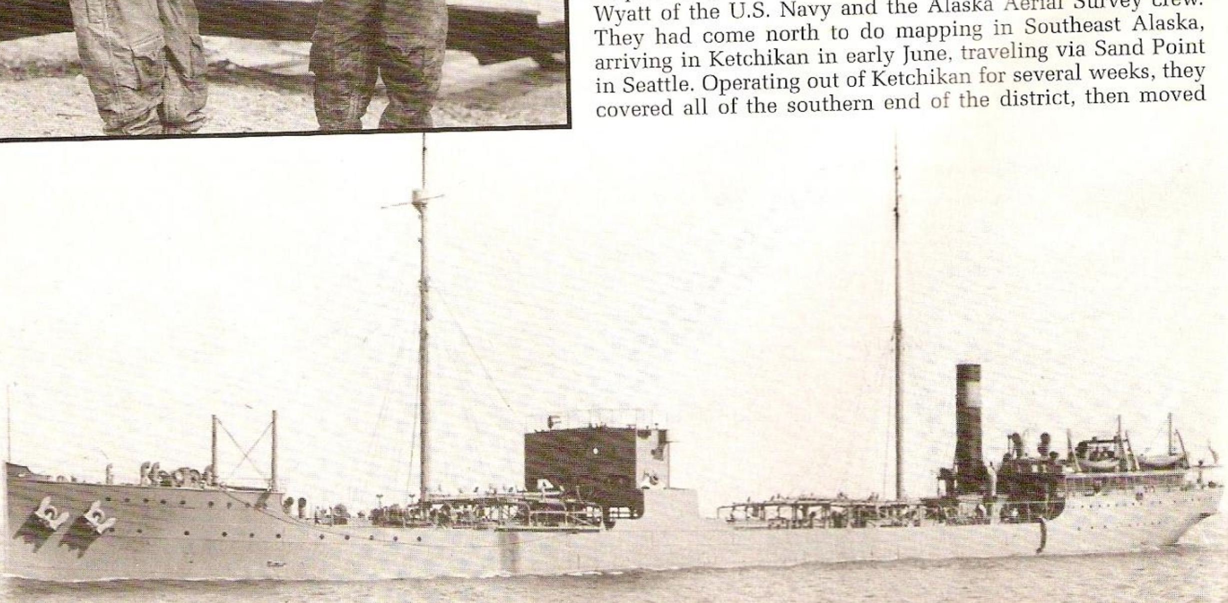

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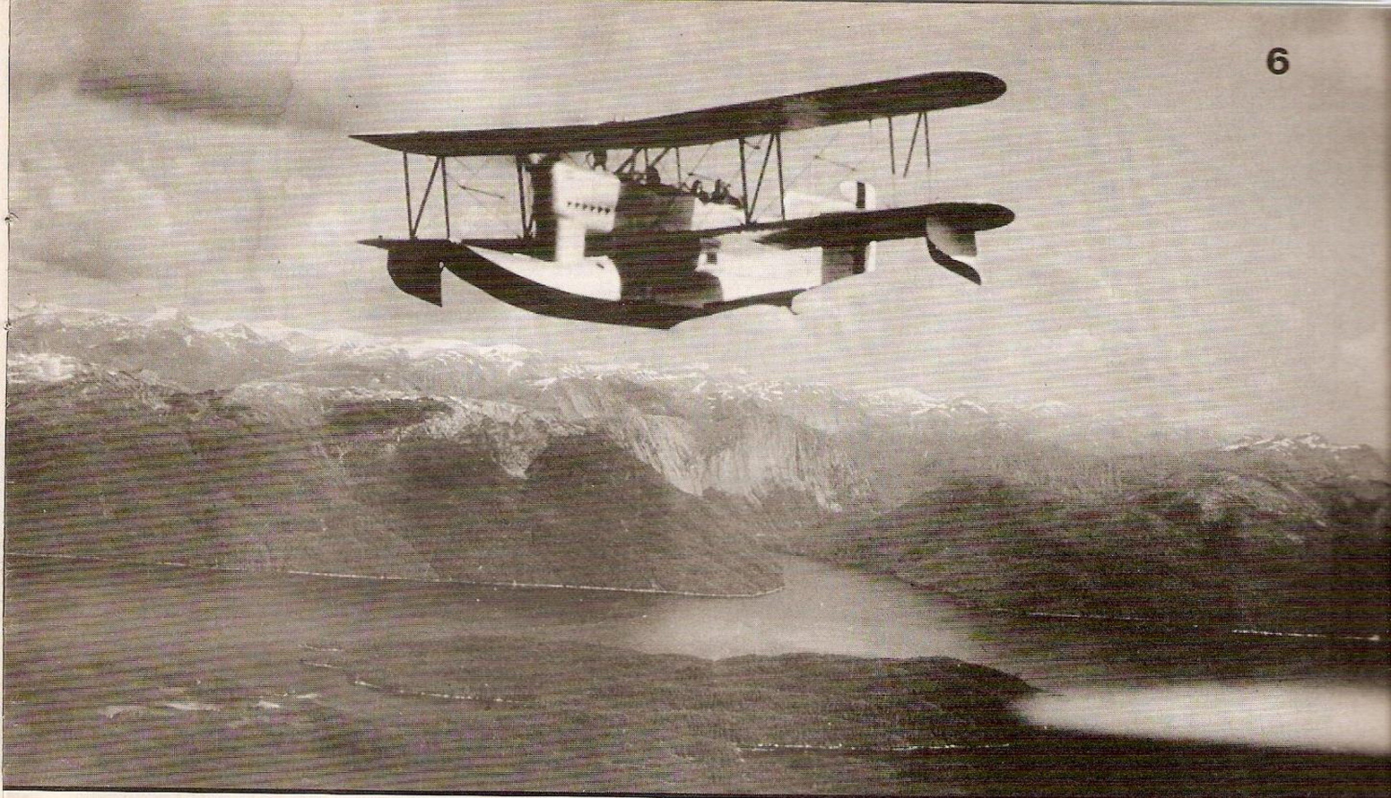

6. Navy photographers were also rather artistic in composing publicity shots, such as this one of an improved Loening O–4 over Rudyard Bay. In all, 1926 expedition flew 30,000 miles.

7. Loening OL–4s on the beach near a Ketchikan dairy, which served as a base, June 11, 1926.

8. A Loening OL–4 being readied at NAS Sand Point in Seattle for flight to Ketchikan. Aircraft were originally shipped from Loening factory on Long Island, New York, to San Diego via the Navy's first aircraft carrier, *Langley* (CV-1).

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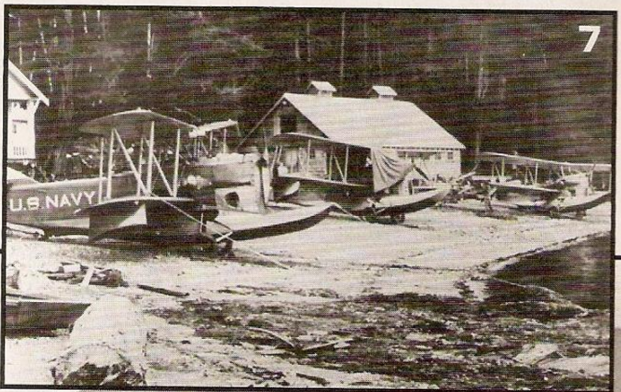

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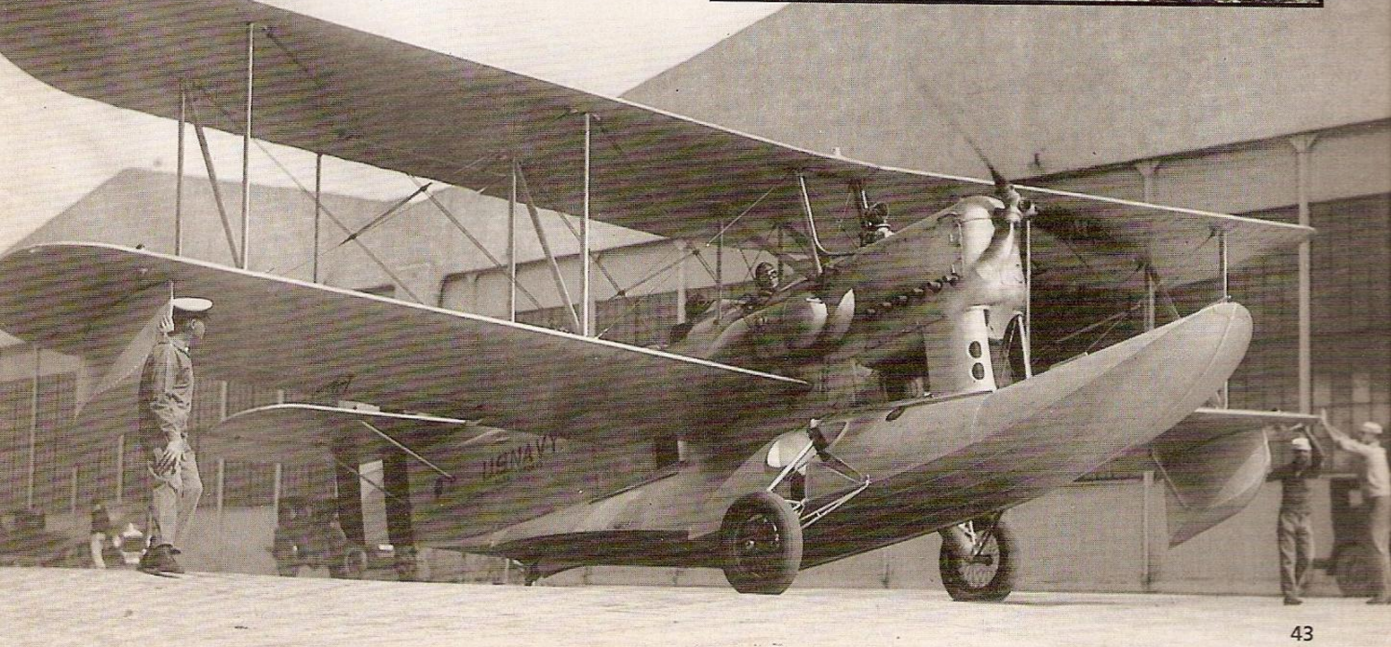
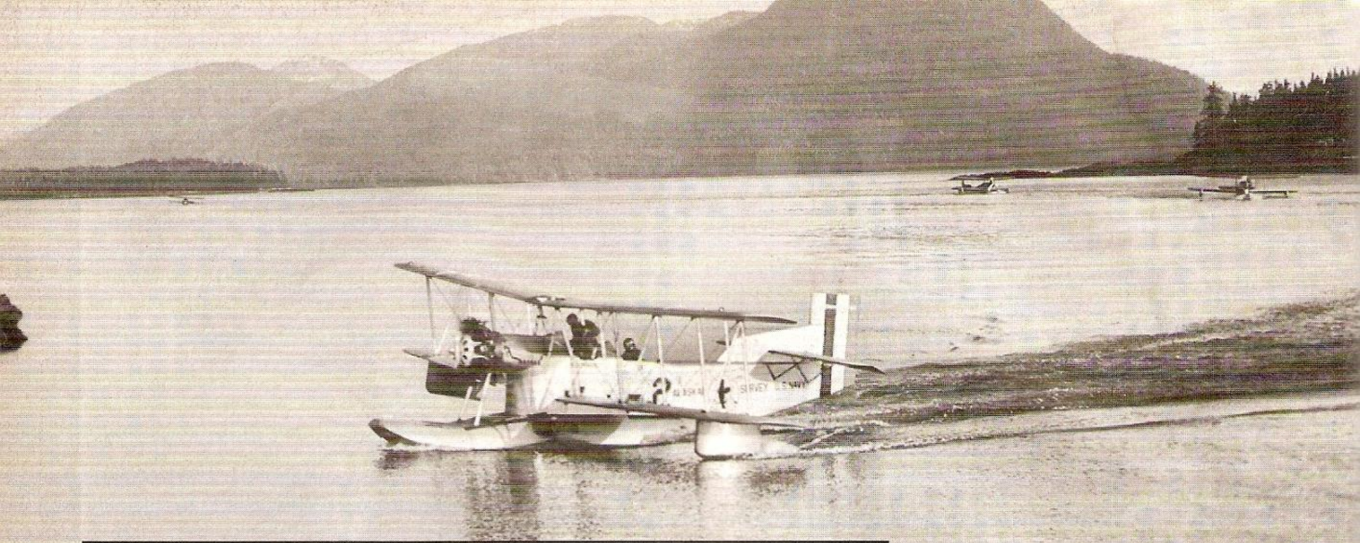
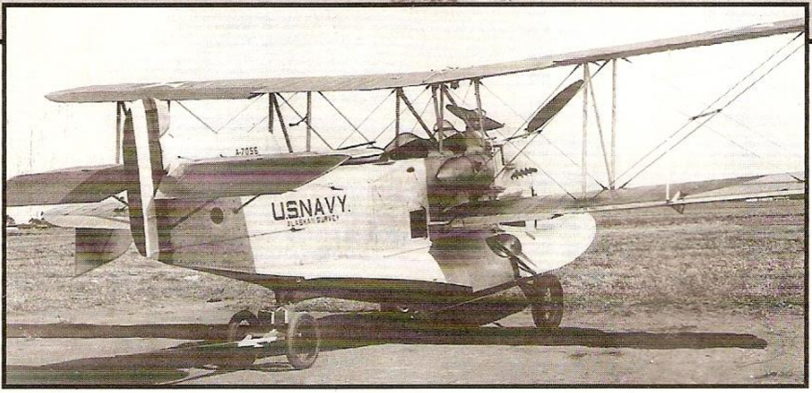






Above: Planing over the still waters of the bay, a Loening OL–4A of the 1926 expedition taxies toward the beach at Ketchikan. Normal crew was three, including photographer, but on mapping flights, standard gunner was not carried. A second pilot, who did navigating, replaced him.

Left: An OL–4 amphibian being readied in Seattle for trip north. Note large oil tank just below pilot's cockpit.

their base to Wrangell and finished that district, before going on to Juneau.

The group had the *USS Gannet*, a former naval minesweeper, and a covered barge, VF-88, which housed a day room and living quarters for the detachment's support. *Gannet* was 187 ft. 10 in. long and could travel at 14 knots. She drew almost 10 ft. of water and, for armament, had two machine guns. Aircraft consisted of three Loening OL–4s and one OL–2 (this was the NA–2 that was used by the Macmillan Expedition to Greenland in 1925 and which was dubbed the "Polar Bear").

The planes arrived at 7:40 a.m. and made Juneau the final base for the completion of their work. Lieutenant Wyatt made no predictions as to how long they would stay. It would depend on the weather conditions, but he did state, "we will stay until we complete the mapping as originally set down for Southeast Alaska."

Detailed plans for mapping were not discussed until Lieutenant Wyatt had a chance to confer with the District Forester, C.H. Flory, regarding the areas to be covered. Wyatt planned to have a plane up the next day, the 13th, and he was to be accompanied by Forester Flory.

By the time the expedition reached Juneau, it had flown about 30,000 miles in 300 hours, and had mapped over 10,000 square miles, about half of the total projected job, all without a single accident or forced landing.

The photographic equipment of the expedition represented the latest developments for mapping from the air. Two types of cameras were used. The cameraman was seated in a cockpit behind and below the pilot, and the exposures were made from below the aircraft. At 10,000 feet, which was the height used for photographing, each exposure covered 7-10 square miles. A second camera was used for oblique photography, with the camera directed horizontally or diagonally downward.

Plane No. 3 was equipped with a radio for communication from the field to the *Gannet*. Radio Electrician Alexander, a naval Warrant Officer, was expert in this field. Using short wave, he was able to establish contact with Japan and a station in the Panama Canal Zone. The expedition also communicated frequently with San Diego, California, its headquarters, reporting its progress to the commander, Admiral Hughes.

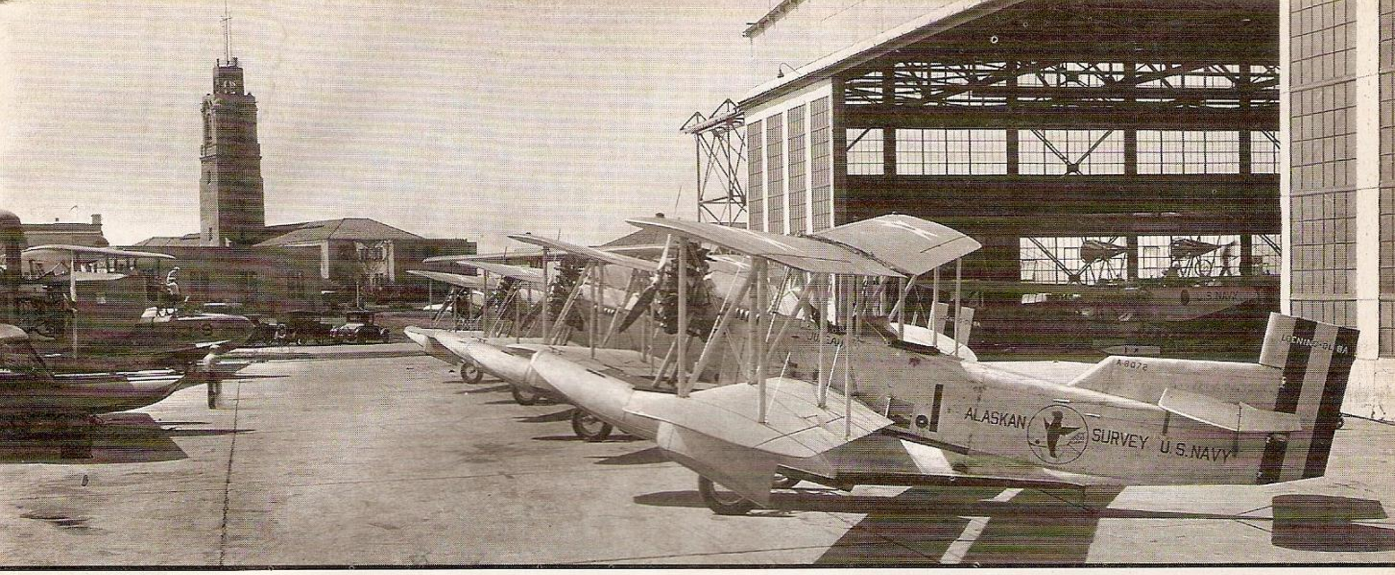
Early on the morning of the 13th, Lieutenant Wyatt took District Forester Flory for a flight in plane No. 1 with P.A. McDonough, Chief Photographer. They covered the distance south of Tracy Arm and returned northeast over the Taku Glacier to Juneau. A continuous height of 2000 feet was maintained and they flew at about 70 knots, Flory making the trip to look over the lakes in the Snettisham district and to observe the possibility of discovering a pass between Long Lake and Turner Lake for a transmission line.

From the flights and photographs taken, it was possible for the Forest Service to pick the timbered areas for more intensive cataloging than had ever been done before, and the character of the timber could be judged to a large degree from the photographs. But further flights revealed that the beaches from which the planes operated were too soft and sandy. With the help of the manager of the Alaska Gastineau Mining Company, timber was supplied for runways and the dock, while warehouses and other properties of the mine were placed at the expedition's disposal.

On September 18 Lieutenant Wyatt spent two wild hours fighting a 50-mph. gale without success as he attempted to reach the top of Mt. Fairweather in his Loening. The flight was successful, however, insofar as it enabled him to prove that Margerio Glacier was inactive and was, in fact, the most feasible route to the foot of Mt. Quincy Adams.

On September 9 Lieutenant Wyatt stated that the expedition's work had been completed and *Gannet* would sail the

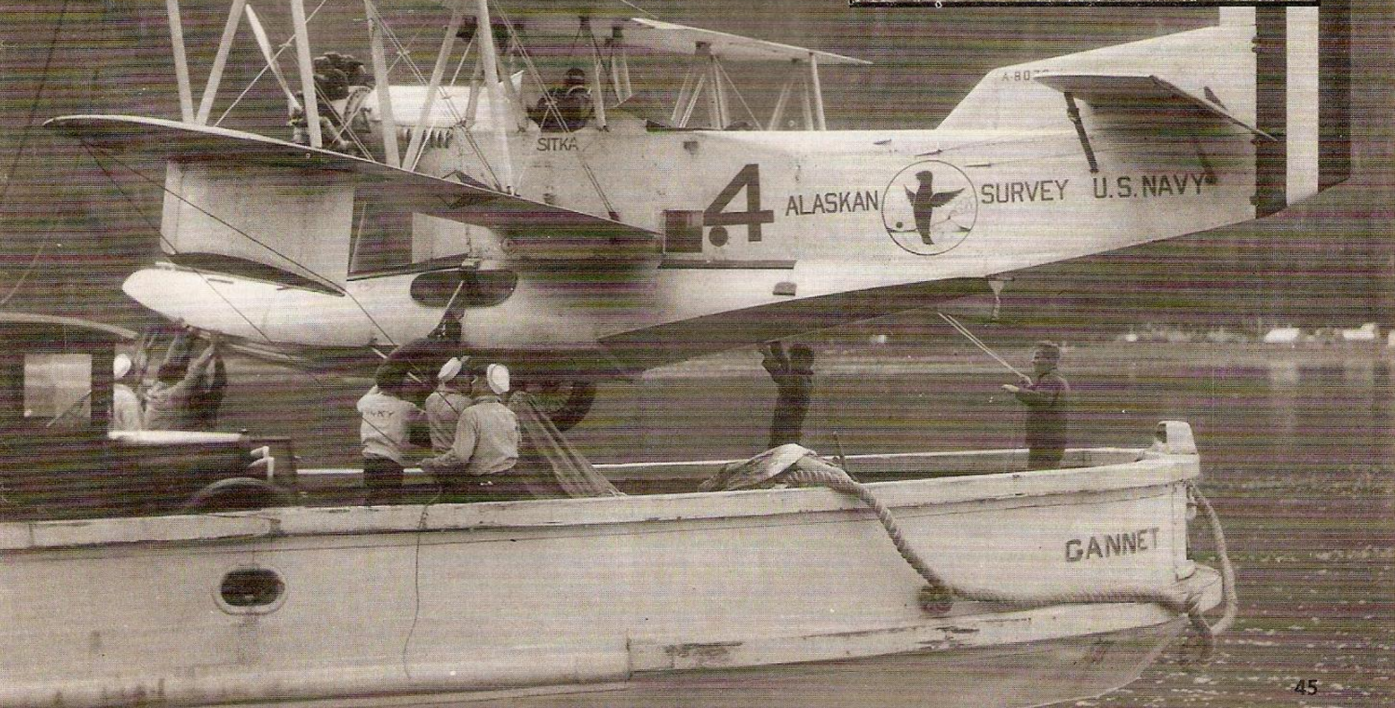
(Text continued on page 48)

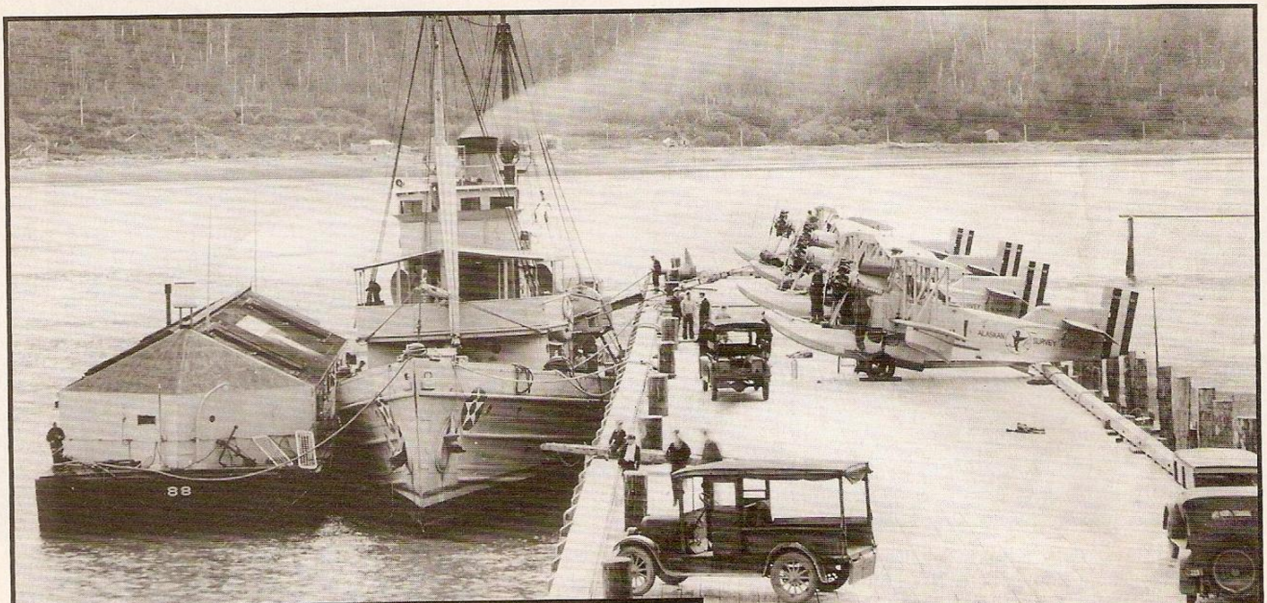


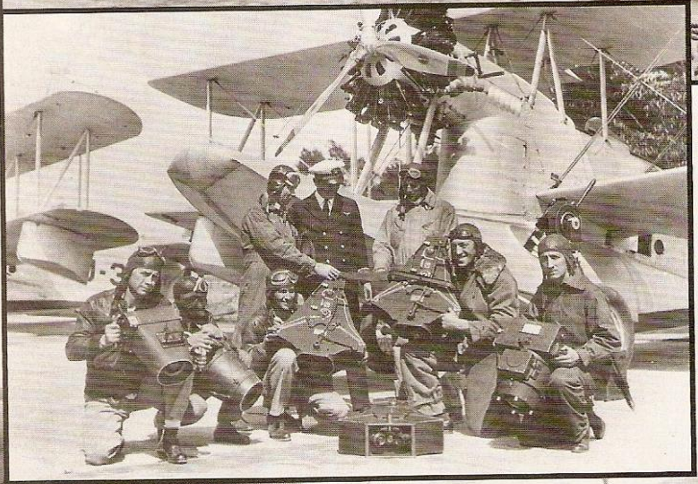
Above: The 1929 expedition begins in San Diego, California with all four improved Loening OL–8As, led by *Juneau*, lined up at the Naval Air Station. Across from them is the rather ugly snout of a Douglas 2TD–1 torpedo bomber.

Right: Looking like a prospector, the Mayor of Petersburg, in campaign hat, poses with Lt. Commander Arthur W. Radford, leader of the 1929 expedition. Mayor owned the largest Alaskan shrimp company, while Radford went on to become Commander of the Pacific Fleet and Chairman of the Joint Chiefs of Staff in 1958.

Below: Alaskan mapping expedition emblem on its side, *Sitka* is hoisted onto the *Gannet* at Petersburg, with the aid of aircrew, ground crew and the unit's Chevrolet truck at left.



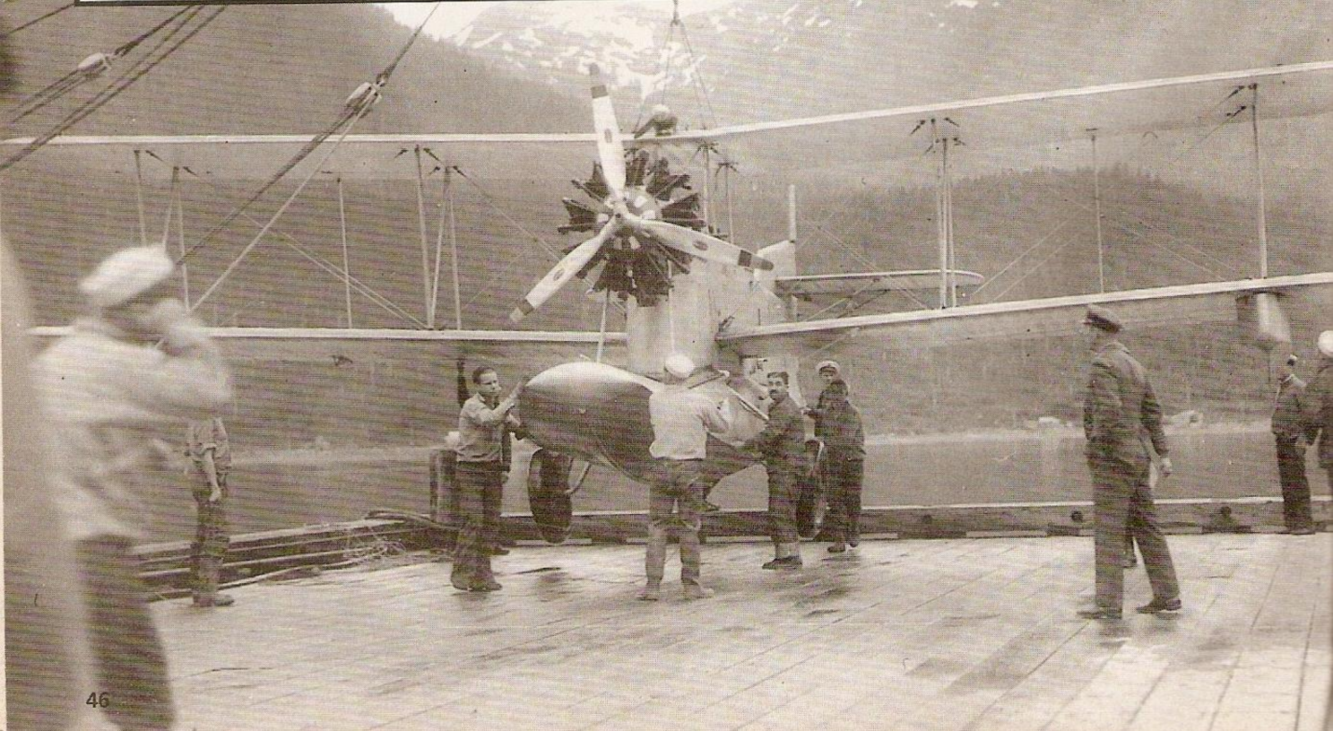


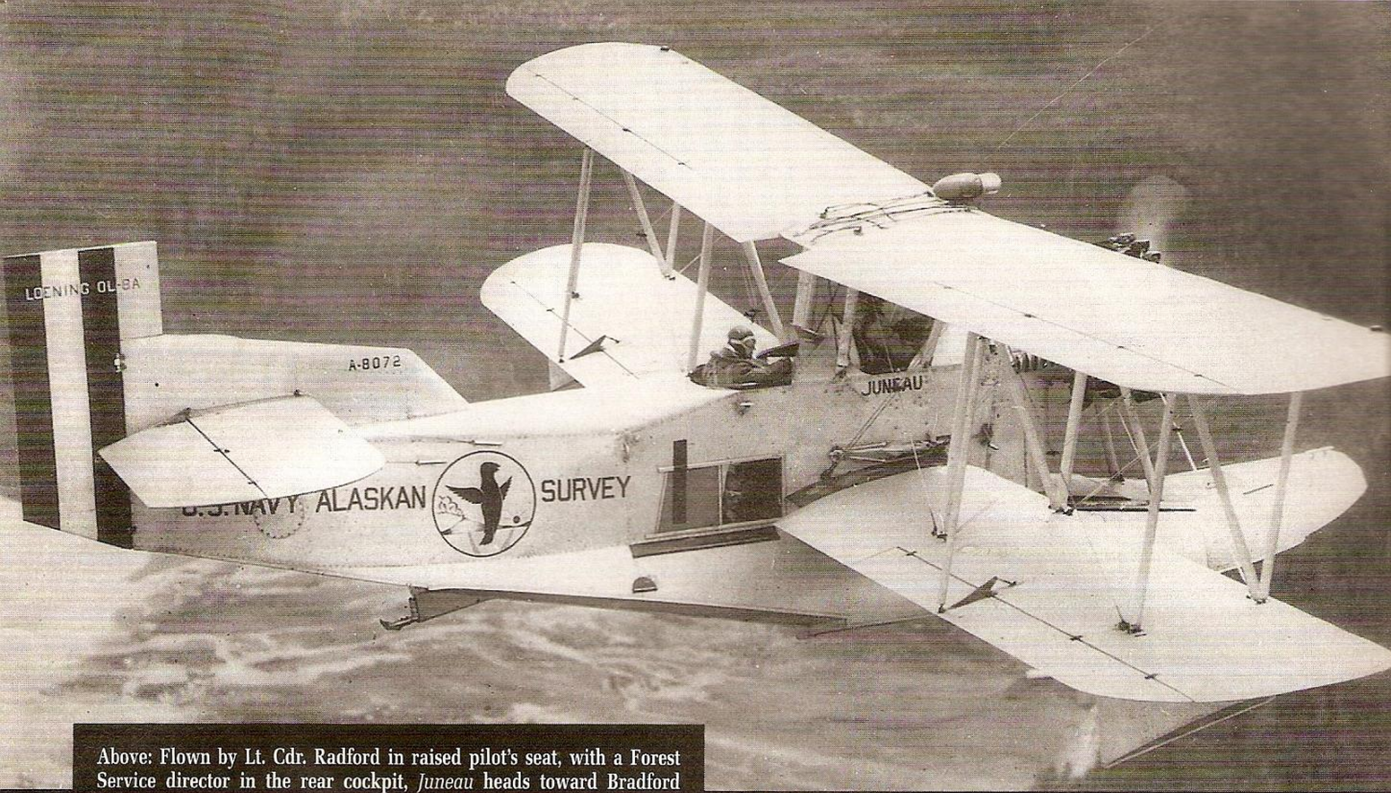


Above: June, 1929, and the Alaskan Aerial Survey is ready for action at Juneau, with Loening 8As, the *USS Gannet* at dockside, accompanied by Barge VF-88, utilized for sleeping quarters. That is Gastineau Channel and Douglas Island in background.

Left: Navy photographer mates show off their oblique and vertical cameras during 1929 survey, with which they used nearly 1,950 rolls of film.

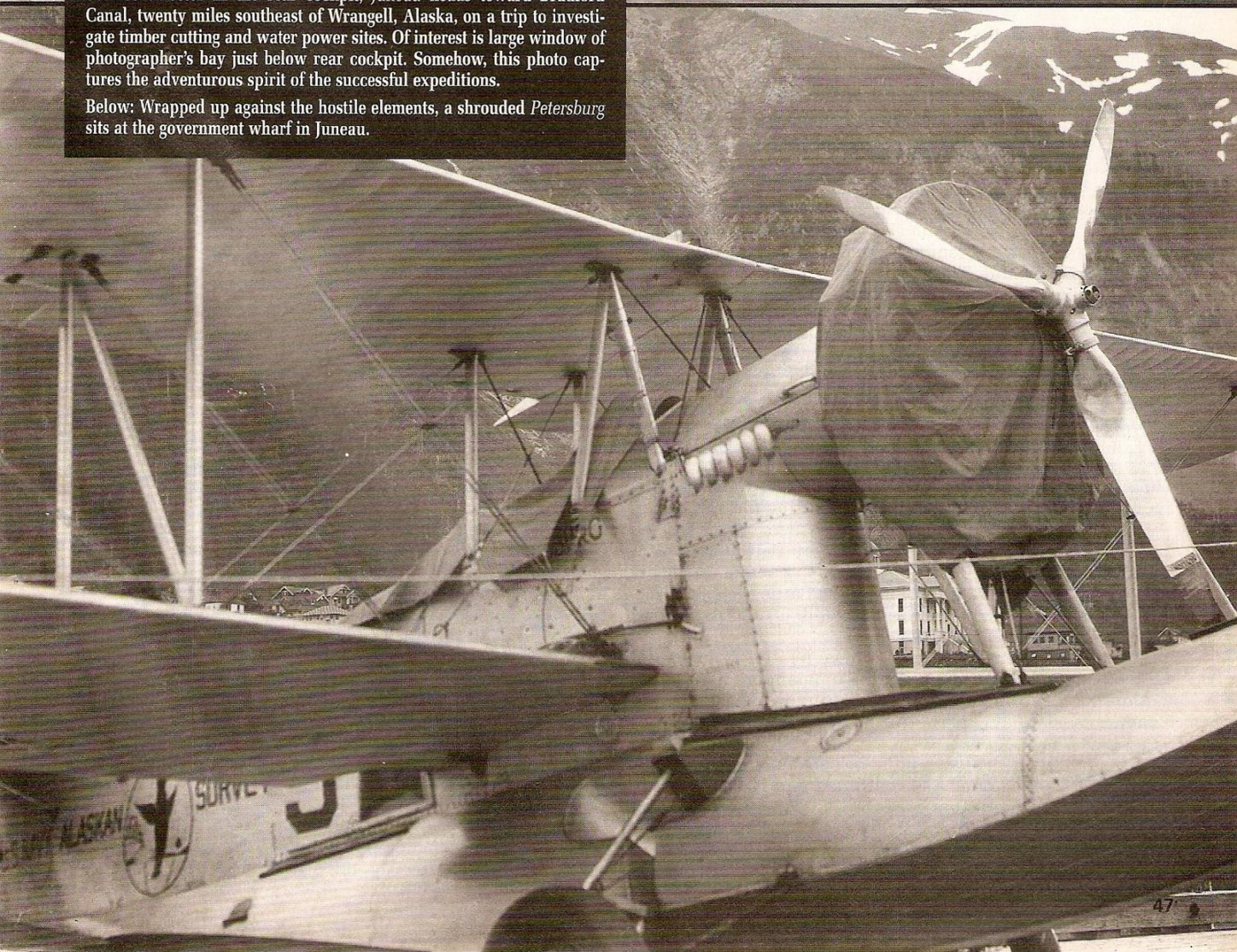
Below: *Juneau* is hoisted to government dock at Juneau, Alaska. Even when the weather was good, rapid changes could occur quickly, leaving crews to find their way through storms and fog.

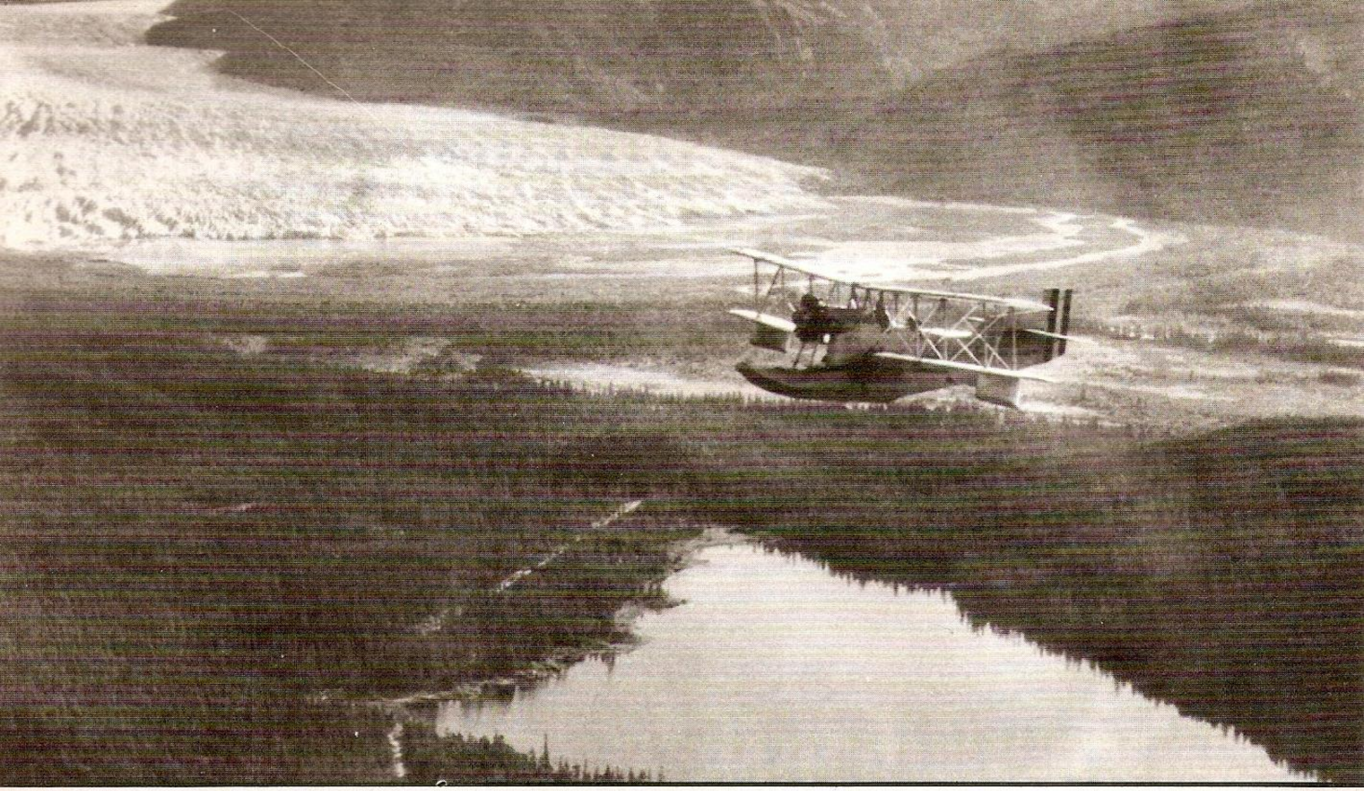




Above: Flown by Lt. Cdr. Radford in raised pilot's seat, with a Forest Service director in the rear cockpit, *Juneau* heads toward Bradford Canal, twenty miles southeast of Wrangell, Alaska, on a trip to investigate timber cutting and water power sites. Of interest is large window of photographer's bay just below rear cockpit. Somehow, this photo captures the adventurous spirit of the successful expeditions.

Below: Wrapped up against the hostile elements, a shrouded *Petersburg* sits at the government wharf in Juneau.





A Loening OL–8A skirts the huge mass of the Mendenhall Glacier, near Juneau, in June, 1929. The area is now a popular stop for cruise ships.

next day at 6:00 a.m. for San Diego, its homeport; the planes would leave at 9:30 a.m. In a parting word, Lieutenant Dillon, the Executive Officer of the Expedition, summed up the expedition's work by saying, "One of the most enjoyable features of our summer in Alaska has been the hospitality of the Alaskan people. I come from the South where we think we know what genuine hospitality is, and I would like it known that never in any place in the United States have we met the genuine article in such generous measures and so universally as we have found it in Alaska."

Three years later, on February 18, 1929, the Secretary of Interior made a formal request to the Secretary of the Navy to complete the aerial survey of the Tongass National Forest, a project which had been started by the Navy's Alaskan Aerial Survey Expedition in 1926. It was agreed that the sum of $15,000 would be transferred to the credit of the Navy Department by the Departments of Interior and Agriculture to help defray the expenses of the survey, and on February 22, 1929 the Secretary of the Navy stated that the Navy Department would undertake the project. Plans were immediately formulated to carry out the work during the summer of 1929. The Chief of Naval Operations issued orders for the organization of the Alaskan Aerial Survey Detachment, as a detached unit of the Aircraft Squadron, to operate under the orders of the Commander-in-Chief of the Battle Fleet, and further stated that the detachment should arrive at its first Alaskan base no later than May 25.

In compliance with orders issued by the Commander Aircraft Squadrons, Lieutenant Commander Arthur W. Radford placed the Alaskan Aerial Survey Detachment in commission at the U.S. Naval Air Station, San Diego, on April 23 and assumed command.

Preparation for the assembling of personnel and material, which had been started, was continued and rushed to completion. The covered barge used for living quarters and photographic laboratory and offices by the 1926 Expedition was reconditioned and the *USS Gannet* was assigned again as aircraft tender, her commanding officer reporting for duty at San Diego on May 1, 1929. After loading material and boarding the detachment's personnel, she departed San Diego on May 6. Her complement consisted of four officers and sixty-one enlisted men regularly attached to the *Gannet*. Five Naval aviators, one medical officer, one supply officer and forty enlisted men comprised the aviation detail.

Four Loening Amphibian OL–8A planes were made available for the survey; one was assigned from VJ Squadron 1-B and three were shipped from the Loening factory in New York via the aircraft carrier *USS Langley* (CV-1) to San Diego. The four planes were named after the Alaskan cities that were to be used as operating bases. Plane number one was *Juneau*, number two *Ketchikan*, number three *Petersburg*, and number four *Sitka*. Special insignia was adopted for them that showed a winged seal against a background of an active volcano and the midnight sun.

The four planes with a total crew of twelve officers and men left San Diego on May 15 and arrived at the U.S. Naval Air Station, Sand Point, Seattle, Washington, on May 17, after stops at Fresno and Oakland, California and Medford, Oregon. Prior to the departure of the detachment from San Diego, the State Department had obtained permission from the Canadian government for the four planes to fly over Canadian territory and use Canadian government radio stations for transmitting movement reports and obtaining necessary weather data. The four planes left Sand Point on May 21 and, after an overnight stop at Alert Bay, British Columbia, arrived in Ketchikan on May 22.

Plane number one, *Juneau*, had been equipped with an SE-1385 radio set while at Sand Point and, with efficient and willing cooperation on the part of British Columbia radio operators, excellent two-way radio communications were maintained throughout the flight from Seattle to Ketchikan, providing the flight leader with reliable weather reports from points along the flight path.

Upon arrival of the *Gannet* in Ketchikan, the detachment was ready to commence photographic operations – one day prior to the date set by the Chief of Naval Operations.

In a similar view to that on opposite page, an OL–8A is shown over the Mendenhall Glacier with Salmon Creek Dam in foreground.

Although photographic operations could have been carried out from Ketchikan, it was decided to move nearer the area to be mapped. An Aerographer (Navy weatherman), with complete equipment for taking upper air soundings and for making a daily weather map and forecast, proved his worth at this stage of the operation.

In making the aerial survey, flight paths four and one-half miles apart were drawn on a chart that showed only the coastline or the area to be mapped; the data required from the photographs was the detail of rivers, lakes and mountains in the interior. The mapping plane with one naval aviator as pilot, another as navigator, and a photographer would then follow these lines at an altitude of 10,000 feet – the photographs were taken through an open hatch in the bottom of the plane with the T–2 four-lens camera. The scale of the photographs taken of areas at sea level was then 1-20,000. Due to the intense cold at the mapping altitude, considerable difficulty was at first experienced with the shutters of the T–2. This difficulty was temporarily overcome by operating the cameras in the Petersburg cold storage plant and observing and correcting the cause of the shutter failures, although failures occurred from time to time later in the summer.

Close-up oblique photographs of the area selected by the Forest Service and Mr. Sargent were taken over the side of the plane with the K–3–A camera. When the summer work first started the actual photographing from 10,900 feet was limited to the time between the hours of 8:00 a.m. and 4:00 p.m. As the season progressed, due to the shortening of days and consequent lengthening shadows, the working time was cut first to between 9:00 a.m. and 3:00 p.m., and finally from 11:00 a.m. to 1:00 p.m.

When rain prevented flying, Lieutenant Commander Radford ordered maintenance work to be done on the aircraft. Inspections were held of personnel and material. The group participated in social and recreational activities and were frequent guests at parties hosted by local residents which were remembered for the delicious food. Fishing became a favorite pastime, particularly on excursions to outlying areas. On one of these, in spite of a heavy downpour, all hands stood in icy-cold knee-deep water and waged a battle with the largest trout that had ever been taken by members of the detachment. After being thoroughly soaked it was decided that a real emergency existed and one of the five gallon cans of emergency rations which is habitually carried in each plane was broken open and inspected and surveyed. Never before had corned beef, hardtack and coffee tasted so good.

From experience gained at Juneau, personnel of the *Gannet* had become quite efficient in hoisting planes to and from the dock, and operating from there, rather than from the beach, became a standard procedure. What had been accomplished was outstanding and probably would have received greater publicity than it did if the United States had not been in an economic Depression. Upon decommissioning of the department on October 31, all photos were securely packed, marked for identification and turned over to the Flag Office, Commander Aircraft Squadrons of the Battle Fleet. During the expedition, the aircraft had logged over 677 hours and had flown over 54,000 miles without an accident, had consumed 16,887 gallons of gas and photographed about 13,000 miles of Alaskan territory using 1,942 rolls of film, from which 5,600 prints were made.

Talk about a bargain! The entire operation cost about $50,000, yet 61 percent of the area of Southeastern Alaska was photographed from the air for posterity. The work done on the Tongass Forest is considered remarkable even today. Arthur W. Radford went on to become a full Admiral and, in 1953, was Commander-in-Chief of the Pacific Fleet. He became the Chairman of the Joint Chiefs of Staff five years later.

Not only did publicity and goodwill result from the expedition for the Navy, but also valuable lessons were learned in the use of aerial cameras in northern latitudes, and worthwhile training was gained in the use of radios aboard aircraft (especially related to reception) and the use of weather reports, and in ground-to-air communication. In the opinion of the Alaska District Forester, the expedition was, "a complete justification for the aerial surveys that have been made

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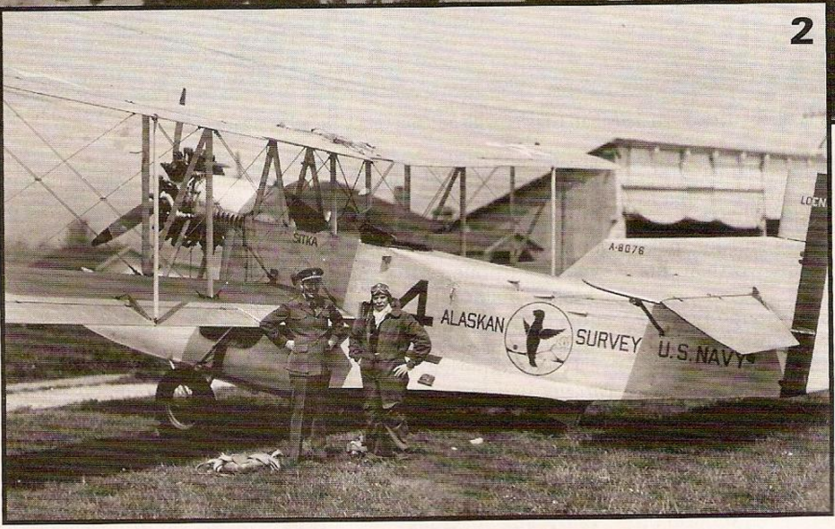

1. The vast expanse of southern Alaska is captured in this shot of a Loening amphibian from the 1929 expedition cruising over rugged mountains that have not lost their snow covering, although it is mid-July.

2. Lt. Commander Radford poses in front of *Sitka*, with a Forest Service official in 1929. In addition to photomapping, aircrews made excellent use of radio transmissions, frequently receiving weather reports while aloft.

3. Loening OL–8As were still standard equipment during the 1932 expedition. Here, *Seward* and *Unalaska*, two new names, are tied up at the Alaska-Washington Airways hangar pier that April.

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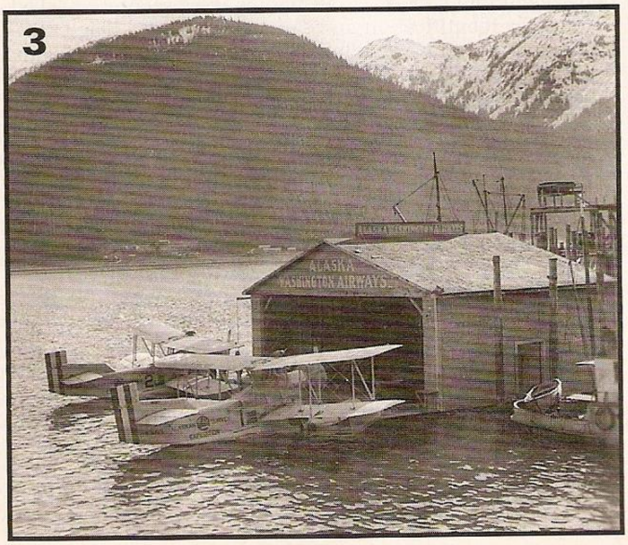

in Alaska and is also indicative of the great value of airplanes in our forces and water power work here. The value of this new power site alone far outweighs the total cost of both the 1926 and 1929 surveys."

The morning of April 27, 1932 saw the arrival in Juneau, directly from Ketchikan, of two Loening OL–8s of the 1932 U.S. Naval Survey Flight – the *Seward* and *Unalaska*. They had taken off from Seattle on Friday, April 23, and flown to Ketchikan, remaining there for several days before flying to Juneau. They planned to take off the next day for Yakutat where they would refuel before proceeding to Seward, Alaska. At Yakutat they were refueled by the airplane tender *USS Gannet*. No stranger to Alaskan water, *Gannet* had served as the tender in the 1926 and 1929 surveys. This sturdy vessel had been named for a large, white, web-footed sea bird and was laid down October 1, 1918 by the Todd Shipyard Corporation of New York.

On April 30, 1931 the *Gannet* was designated a minesweeper, AM-41, for duty with aircraft and she was reclassified as a seaplane tender on January 22, 1936, becoming the *USS Gannet* (AVP-8). *Gannet* was tending patrol planes at Hamilton, Bermuda when the Japanese struck Pearl

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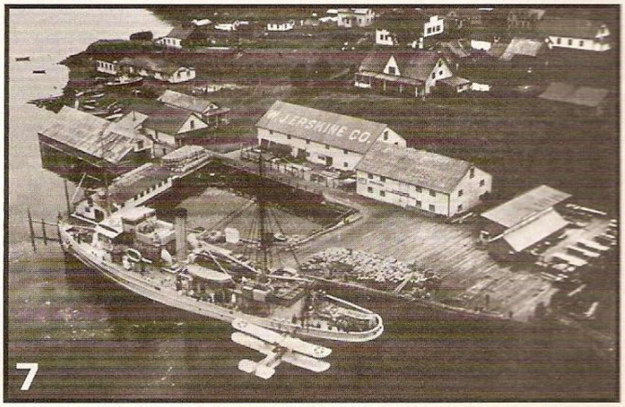


4. A Loening OL–8A flying past Isanatski Volcano, Unimak Island, in 1932, during flights to map Aleutian chain.

5. *USS Gannet* gassing up her planes at Yakutat Bay. Reclassified as a seaplane tender in 1936, *Gannet* was torpedoed by a German submarine off Bermuda and sunk on June 7, 1942.

6. A Loening OL–8A shown over Kodiak Island, home of the giant bear. During April to August, 1933 expedition, ground temperatures averaged a low of 28 to a high in the mid-30s.

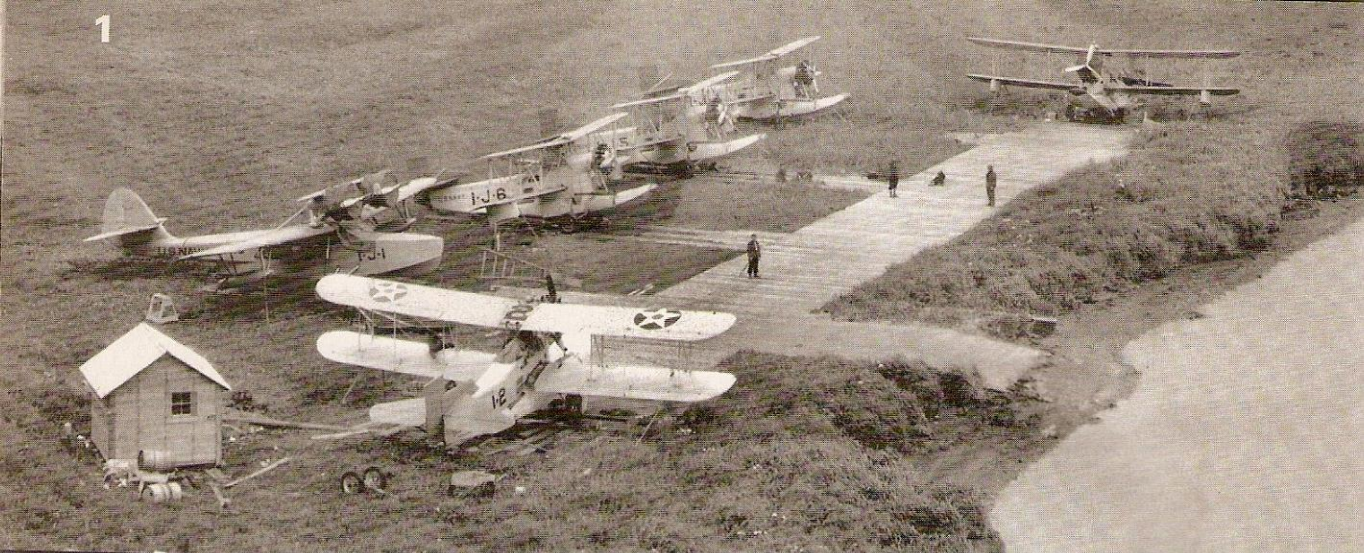
7. The *Gannet*, with one of her amphibians, tied up to the dock on Kodiak Island, July, 1932. When accountants studied all six expeditions, not one cost more than $15,000.

Harbor. She was the tender to Patrol Squadron 74, which provided air patrol and coverage to the base, and was also the communications center for all aircraft operations in the area.

Before dawn on June 7, northwest of Bermuda, *Gannet* was hit by submarine torpedoes. She went down so rapidly that her decks were awash within four minutes, and she carried 14 of her crew with her. Twenty-two men were rescued by two planes of Patrol Squadron 74 which both made daring landings in heavy seas. *USS Hamilton* (DMS-18), led to the scene by one of the same planes, rescued 40 others.

Returning to the 1932 survey: After reaching Seward, the Loenings made flights to Chignik Bay on the Alaska Peninsula, to the shores of the Shelikof Strait and to the north shore of Kodiak Island. They planned to survey and map these regions for the United States Coast and Geodetic Survey, with hopes to complete the work in one season.

Lieutenant Robert H. Harrell commanded the *Seward* and headed the expedition; Lieutenant John Pinkney W. Vest commanded the *Unalaska*. Their planes departed Juneau on April 28, 1932, and the ships did not return to San Diego until August 20. During the summer their planes flew a total of 387.5 hours to reconnoiter and survey nearly 5,000 miles of coastline, most of it extremely rugged and almost unknown; 3,700 exposures and 8,500 photographic prints were made in connection with the work. The mission was accomplished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1. The aircraft of the 1934 Aleutian Island survey expedition at Kanaga Island. In addition to five trusty Loenings, including improved Loening OL–9s, which had a top speed of 120 mph. and a ceiling of 14,300 ft., the unit now operates with a Douglas RD–2 Dolphin, twin engined, high wing monoplane, at far left.

2. An RD–2 on the stern of *USS Gannet*. The 1934 expedition ended its work early, in July, due to bad weather and the fact that both the Dolphin and OL–9s were showing signs of hard use and heavy wear.

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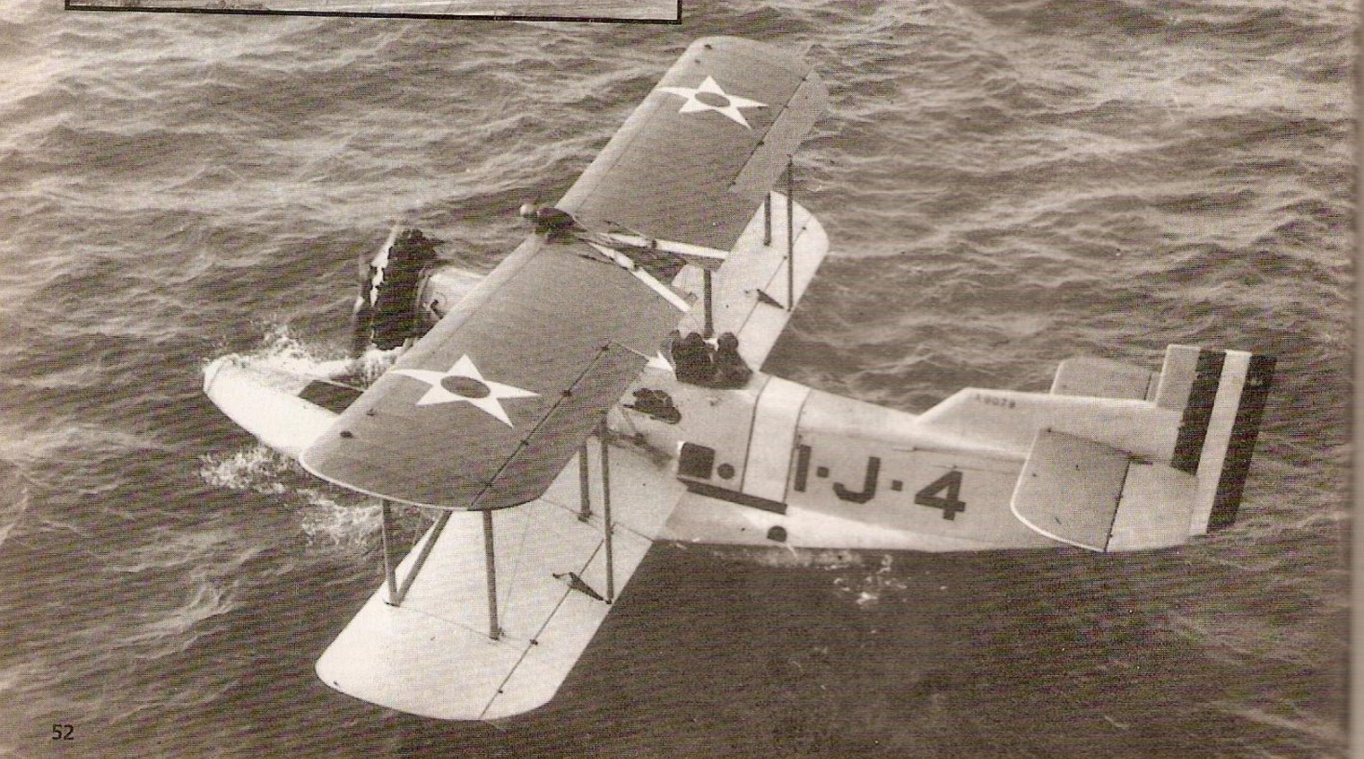
3. Loening OL–9 at Kanaga Island.

4. Loening OL–9 taxiing near Kanaga Island. It carries the Reclining Lion silhouette emblem of Utility One (1-J) ahead of national aviation star, with the motto *En Garde* below.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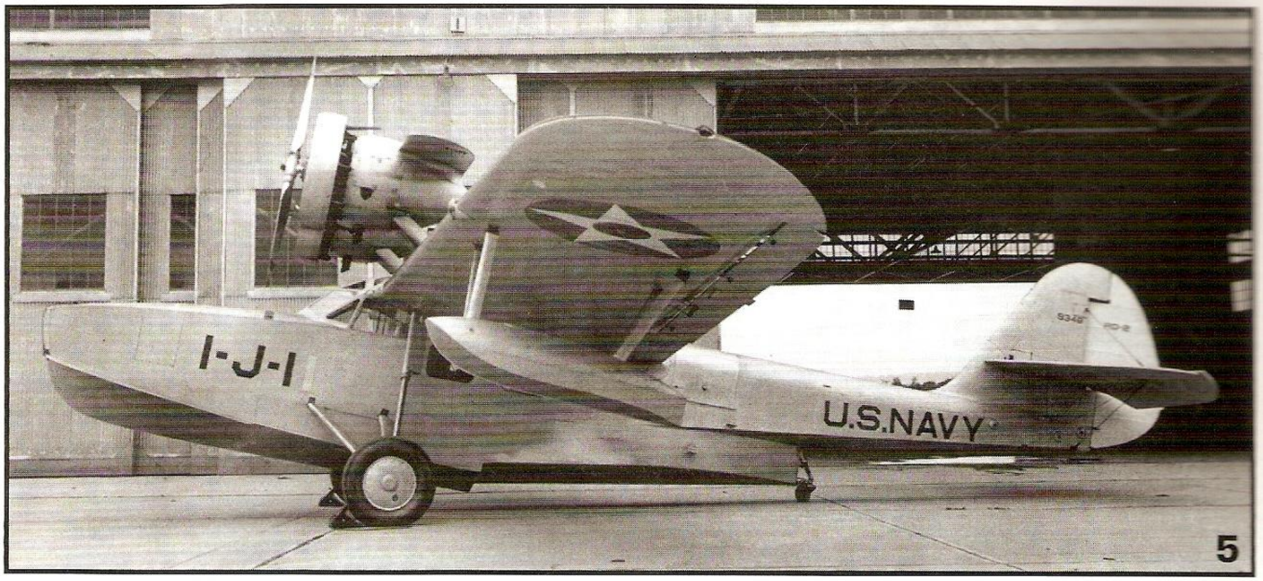


5, 6 & 7. Douglas RD–2 Dolphin amphibian was powered by a pair of P&W R-1340-96 radials, each generating 450 hp. These gave it a top speed of 153 mph. and took it to an altitude of just under 16,000 ft. In regular service RD–2s were used as VIP transports and admirals' aircraft. Of interest is the small stub-wing protruding from the engine nacelles mounted above the aircraft's wing.

without accident and was completed nearly a month ahead of schedule.

On March 4, 1933, letters were sent to Commander H.S. Badt from the Chief of Naval Operations and the Commander-in-Chief of the U.S. Fleet, with reference to forming another survey, this time to the Aleutian Islands.

The Aleutian Islands Expedition consisted of the submarine tender, *USS Argonne* (AS-10), the *USS Swallow* (AM-65), the *USS Kingfisher* (AM-25), two minesweepers and the ever-present *Gannet* (AM-41).

The temperature during the survey reached the high 30s and a low of 28 degrees, during the period of April to August, with winds averaging 65 to 70 knots for the entire time they worked.

In 1934 yet another Aleutian Island Survey Expedition was formed, utilizing five Loening OL–9s and one Douglas Dolphin. On May 7 the entire squadron was ferried to the Navy Yard at Puget Sound, Bremerton, Washington. All wings and tail surfaces were removed from the OL–9s and stored in No. 2 hold. Tail surfaces were removed from the Dolphin and the plane was secured on top of No. 3 hold.

The squadron arrived at Dutch Harbor on May 17, 1934, and the Douglas Dolphin RD–2, 1–J–1 was secured on the beach at Unalaska. Two Loening OL–9 aircraft, 1–J–3 and 1–J–5, were transferred to the dock at Dutch Harbor and assembled. Two aircraft, 1–J–3 and 1–J–5, obtained oblique photographs of Unalaska and the islands to the eastward on May 22. On May 31 the Attu detachment made reconnaissance flights.

June 3 saw the arrival of 1–J–2 and 1–J–4 at Kanaga Bay from Kuluk Bay. June 5, 1934 was a busy day. At Kanaga the men started installing a sick bay and building a wooden ramp on the northwest side of the bay for servicing the aircraft as needed. Photographs were taken of all the lakes and valleys, but the crews could not find a possible landing place in the interior of Attu. By the end of July it was apparent that few opportunities would arise for further photographic work and plane flights. The Douglas Dolphin RD–2 had become unsafe for further operations due to excessive use and the Loening OL–9s were showing signs of hard use but no suitable facilities for repair were available. By August fog was persistent and widespread. As a consequence inactivity for as long as three days at a time began to cast gloom over all hands and, in September, the men were released from duty.

On March 26, 1935, Lieutenant D.L. Conley of U.S. Navy was ordered to form another Aleutian Islands Survey Expedition at the Naval Air Station in San Diego. The detachment was composed of three JF–1 Grumman Duck aircraft, five officers and 25 enlisted ratings.

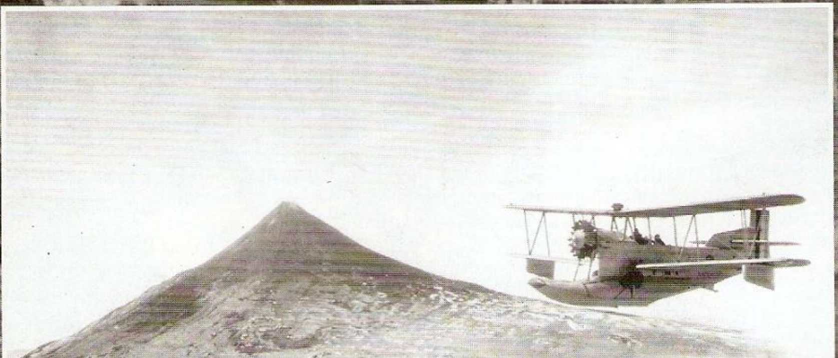
The expedition departed the Navy Yard at Puget Sound on April 23. One plane was carried on the minelayer *USS Oglala* (CM-4), one on the minesweeper *USS Quail* (AM-15), and the third, with the bulk of the detachment material, on the *USS Vega*. The operations of the aircraft were conducted almost entirely from the tenders *Oglala*, *Gannet* and *Quail*. A ramp and parking platform were constructed at Dutch Harbor to be used as a convenient method of temporarily putting planes on the beach for necessary work that could not be performed onboard a minesweeper tender. The mobility and convenience of this method of handling showed itself useful for future expeditions.

Photographic work in the Kiska area was finished on May

17. On May 18 the *Gannet* reported to the Aleutian Islands Survey Expedition for duty and was assigned to the Air Detachment, relieving the *Oglala* as tender. Sufficient deck space was available on *Oglala* to set a plane of the JF–1 type down on its wheels. Upkeep and maintenance were very easy in this case, and the boom arrangements were suitable for fast and safe handling.

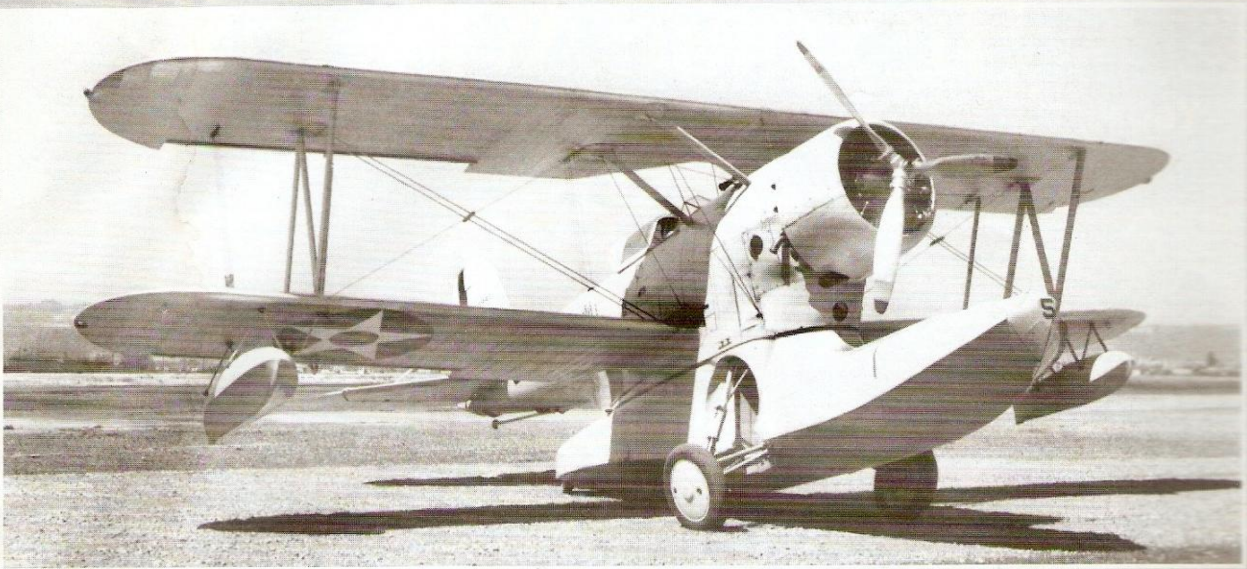
While operating from the minesweeper the planes were handled by a cradle which stood some six feet off the deck and had been developed on previous survey expeditions. The height was necessary to protect the plane from following seas and rolling, but it made maintenance difficult, making it necessary to have a shore base where the planes could be periodically sent for upkeep.

The organization and operation of the aircraft detachment was entirely satisfactory to its commanding officer, and Lieutenant Conley expressed his appreciation for the loyalty and willingness displayed during the season's operations. He felt that the personnel were sufficient but could have used

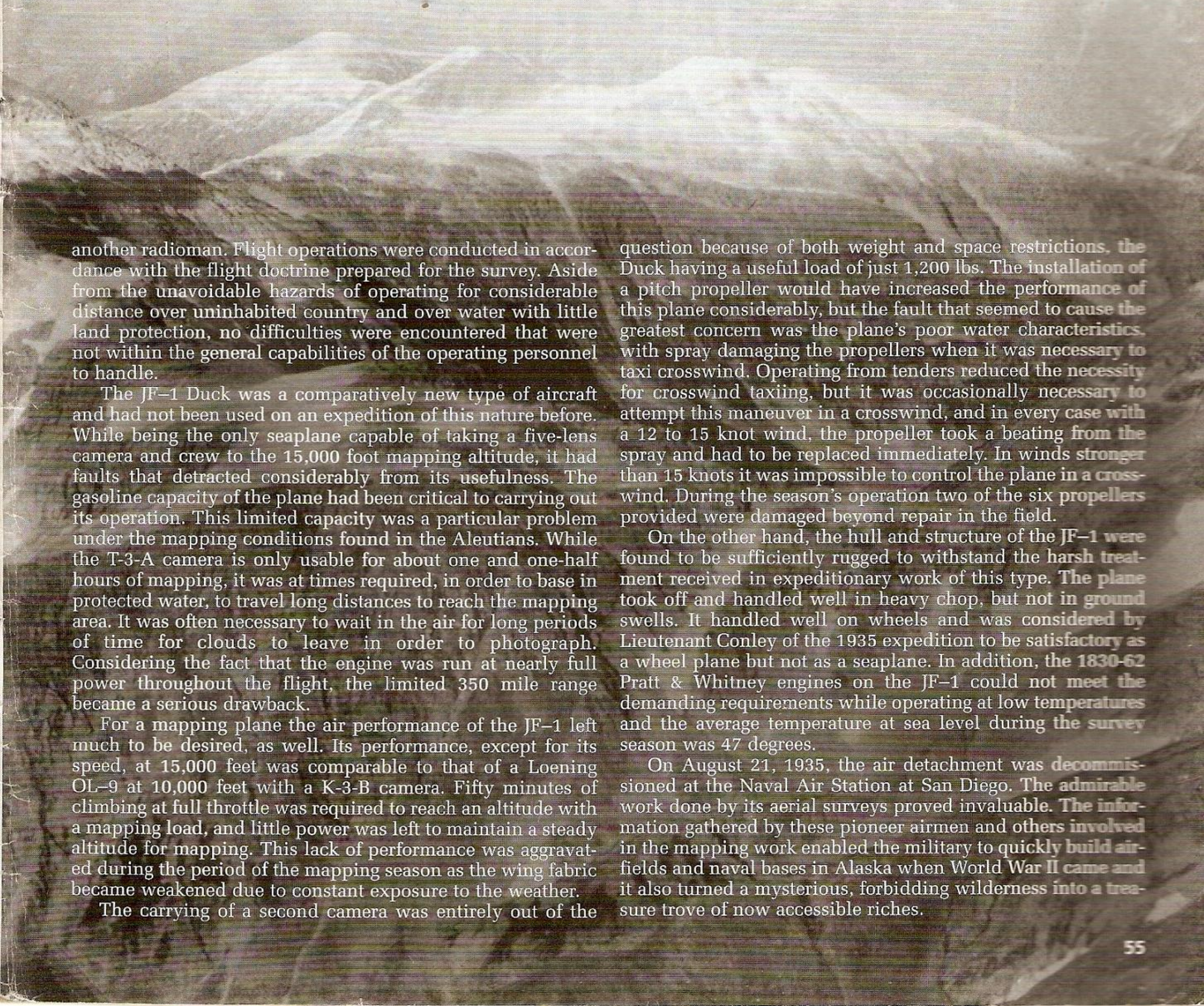


Above: Neither rain, nor fog, nor storm prevented the Loening fleets of the Alaska Air Survey from doing the job, which finally ended in August, 1935, without one major accident. Here, an OL–8 overflies a volcanic peak south of Kodiak.

Left: Long flights over dangerous and barren territory was the lot of the Air Survey's pilots in mapping southern Alaska, as exemplified by this shot taken from another Loening of a solitary ship near Shishaldin Volcano in the Aleutians in the summer of 1934.



In 1935, Grumman JF–1 Duck joined the survey team but, although newer by nearly ten years and faster, it left much to be desired in hauling heavy loads and had poor water handling characteristics, even though the Duck took off and landed well in a heavy chop.



another radioman. Flight operations were conducted in accordance with the flight doctrine prepared for the survey. Aside from the unavoidable hazards of operating for considerable distance over uninhabited country and over water with little land protection, no difficulties were encountered that were not within the general capabilities of the operating personnel to handle.

The JF–1 Duck was a comparatively new type of aircraft and had not been used on an expedition of this nature before. While being the only seaplane capable of taking a five-lens camera and crew to the 15,000 foot mapping altitude, it had faults that detracted considerably from its usefulness. The gasoline capacity of the plane had been critical to carrying out its operation. This limited capacity was a particular problem under the mapping conditions found in the Aleutians. While the T-3-A camera is only usable for about one and one-half hours of mapping, it was at times required, in order to base in protected water, to travel long distances to reach the mapping area. It was often necessary to wait in the air for long periods of time for clouds to leave in order to photograph. Considering the fact that the engine was run at nearly full power throughout the flight, the limited 350 mile range became a serious drawback.

For a mapping plane the air performance of the JF–1 left much to be desired, as well. Its performance, except for its speed, at 15,000 feet was comparable to that of a Loening OL–9 at 10,000 feet with a K-3-B camera. Fifty minutes of climbing at full throttle was required to reach an altitude with a mapping load, and little power was left to maintain a steady altitude for mapping. This lack of performance was aggravated during the period of the mapping season as the wing fabric became weakened due to constant exposure to the weather.

The carrying of a second camera was entirely out of the question because of both weight and space restrictions, the Duck having a useful load of just 1,200 lbs. The installation of a pitch propeller would have increased the performance of this plane considerably, but the fault that seemed to cause the greatest concern was the plane's poor water characteristics, with spray damaging the propellers when it was necessary to taxi crosswind. Operating from tenders reduced the necessity for crosswind taxiing, but it was occasionally necessary to attempt this maneuver in a crosswind, and in every case with a 12 to 15 knot wind, the propeller took a beating from the spray and had to be replaced immediately. In winds stronger than 15 knots it was impossible to control the plane in a crosswind. During the season's operation two of the six propellers provided were damaged beyond repair in the field.

On the other hand, the hull and structure of the JF–1 were found to be sufficiently rugged to withstand the harsh treatment received in expeditionary work of this type. The plane took off and handled well in heavy chop, but not in ground swells. It handled well on wheels and was considered by Lieutenant Conley of the 1935 expedition to be satisfactory as a wheel plane but not as a seaplane. In addition, the 1830-62 Pratt & Whitney engines on the JF–1 could not meet the demanding requirements while operating at low temperatures and the average temperature at sea level during the survey season was 47 degrees.

On August 21, 1935, the air detachment was decommissioned at the Naval Air Station at San Diego. The admirable work done by its aerial surveys proved invaluable. The information gathered by these pioneer airmen and others involved in the mapping work enabled the military to quickly build airfields and naval bases in Alaska when World War II came and it also turned a mysterious, forbidding wilderness into a treasure trove of now accessible riches.